

Taşun Kale

Keban Rescue Excavations
Eastern Anatolia

Anthony McNicoll

British Institute of Archaeology at
Ankara
Monography No. 6

1983

PREFACE

In 1968, during the construction of a huge hydro-electric barrage on the upper Euphrates, the Middle East Technical University (METU) initiated the Keban Dam Area Salvage Project (fig. 1). Over the following five years numerous archaeological sites in the projected flood zone were surveyed and excavated by Turkish and foreign teams working with the permission of the Directorate General of Antiquities under the aegis of the METU. One of the threatened sites was Taşkun Kale, the excavation of which formed one facet of the British Institute of Archaeology at Ankara's multi-disciplinary Aşvan Project, a rescue programme developed and directed by Dr D.H. French as part of the Institute's contribution to the wider salvage operations (French 1973: 73-77).

The Taşkun Kale rescue dig was a brief one, lasting a total of fifteen weeks spread over the 1970, 1971 and 1973 seasons. The following account of the stratigraphy, artefacts and architecture constitutes a basic, skeletal record of the dig, with a minimum of interpretation. It is followed by Roland Fletcher's analysis of the architectural organization of the kale, and some briefer appendices. Eventually other specialist accounts and interpretations - particularly of the environmental material and of the copious animal and human bones recovered from the site-will, it is hoped, be forthcoming to flesh out further the bones.

I owe a debt of gratitude to many people and organizations who helped me excavate and publish this site.

Firstly, the local authorities. Permission to dig at Taşkun Kale was granted to Dr D.H. French, Director of the Aşvan Project, by the Turkish Directorate-General of Antiquities under Bay Burhan Tezcan. During the Taşkun Kale seasons the Directorate was represented by Bayan Oya Kozaman (1970), Bay Kemal Can (1971) and Bay Yilmaz Şimşek (1973).

Secondly, the financiers. Most of the excavation funds, totalling about £5,000 over three seasons, came from the British Academy either directly to the Aşvan Project, or more circuitously through the British Institute of Archaeology at Ankara. The Meyerstein Fund of Oxford University provided grants in 1971 and 1973. In 1979, grants from the Sydney University Special Research Project Grants enabled me to organize the kale pottery and to have plans and sections prepared. In 1982, six months study leave, given by The University of Sydney, enabled me to deliver the coup de grace to this report.

Thirdly, the backers. David French (Director of the British Institute of Archaeology at Ankara and of the Aşvan Project) was the motive force behind the excavations at Taşkun Kale. The Aşvan Project was his project and he inspired it in all its elements, whether by convincing the unconvinced in London or by rousing the troops in the field with supper-time harangues over the DDT-soaked grapes - harangues which covered topics ranging from the out-and-out libellous through the mere Kritik of Binford (1967) to David's vision of the

first multi-disciplinary expedition in Turkey. My other major backer was the late Dame Kathleen Kenyon, without whose support the 1973 season, which gave us about 66% of the plan of the fortress and 50% of the plan of the church, would not have taken place.

And finally the excavation staff, unpaid and paid. The unpaid staff was as follows:

- 1970 Stephen Mitchell, Shereen Ratnagar, Colin Riddler, Derek Walter, Ulge Göker, Anthony Tollington
- 1971 Richard McKane, Avis Harrell, Nicholas Mitchell, Beatrice Teissier, Geoffrey Probert, Ulge Göker, Jonathan Hunn
- 1973 Melek Derviş, Merle Langdon, Turhan Kâmil, Mary Frost Pierson, Marian Phillips, David Williams, George Willcox

The architects were Tamara Winikoff (1970-71) and Sarah Mahaffy (1973). Conservators were Pamela Pratt (1970-71) and Ann Wood (1973). House supervisors were Sionid Alban-Jones and Pat Conroy (1971), and Jan Diamant and Monika Helms (1970-71). Draughtsman in 1970-71 was Tamara Winikoff and in 1973 Jean Carpenter. The cataloguing of the pottery and small finds was carried out by Margaret Wheeler.

I sometimes think that it would be worthwhile to have in every dig report the director's honest estimate of the capabilities of individual trench supervisors, along with a table showing who dug which trench. But in the case of Taşkun Kale, a rescue excavation, such an estimate would be invidious. Meticulous brush-and-trowel work in 1970 and 1971 was succeeded by a pick-and-shovel approach in 1973. Whatever the demands made of them, the supervisors stuck to their task from the setting forth in the cold pre-dawn dark, through the blazing heat of the parched midday till the knock-off drinkies on the roof at dusk, when, as the returning cattle raised dust and the storks clicked their beaks all around us, the day's events were celebrated or bemoaned.

The paid workers were local villagers from Aşvan and from Fatmalı (fig. 2). They are now dispersed, their land flooded. The Turkish countryman has all the virtues of the "old-fashioned British labourer" of whom Wheeler (1954: 148) spoke nostalgically in the early '50s. Without their muscle we could have moved only one-tenth of the soil. Without their friendship and that of their families in the villages, our sojourns at Aşvan would have been less than one-tenth enjoyable.

During all the seasons at Aşvan one person in particular, Bay Turgay Sunguroğlu of Elâzığ, showed us constant kindness and helped us in many ways. Turgay Bey's longstanding family connexion with Aşvan and his influence there were always a benefit to the dig.

Since the digging ended in 1973 the bulk of the work has taken place in short bursts snatched between other duties as is the case, alas, in most write-ups of digs. Illness also has caused delays. In 1974 I and my wife, Tamara Winikoff, spent a three-week study season in Elâzığ working on the excavated material. Thereafter the write-up proceeded in fits and starts, with the help of the following: Lorraine Gee, Jon Hosking, Sherry-lee Evans, David Williams and Stephen Hart. I owe a lot to Roland Fletcher, too. Roland's enthusiasm and persuasiveness in the cause of spatial archaeology were a stimulus during the dark endless days of pot profile paste-ups. The pottery, plans and

sections, which are the real crux of the report, were drawn for the publication by Tamara Winikoff. Richard K. Harding gave valuable photographic assistance, and Mrs Pat Smith displayed her customary skill and patience to create an orderly typescript out of an almost illegible manuscript.

The inscriptions were examined by Professor G. Segal in the first instance, and later by Dr S. Brock. I was helped in the examination of the coins by Mrs Helen Brown, and in the study of the glazed pottery by Dr James Allan. I owe much inspiration to Stephen Mitchell, whose publication Asvan Kale is the ying of Taşkun Kale's yang. Stephen said many things that I would have liked to say about the Asvan Project material more skilfully than I could.

To this cast of scores go my thanks. All have contributed to make Taşkun Kale as good a dig and publication as possible: its shortcomings and faults are mine alone.

This publication is dedicated to the memory of Kathleen Kenyon.

Anthony McNicoll,
University of Sydney, 1983

LIST OF CONTENTS

Preface		i
Plates and Figures		v
Bibliography and Abbreviations		xi
Chapter 1	Basic data Location and surroundings Aims, excavation techniques and analysis	1
Chapter 2	The <u>kale</u> Architecture Stratigraphy Dating Overall sequence of occupation	7
Chapter 3	The church area Architecture Stratigraphy Dating	23
Chapter 4	Other areas	53
Chapter 5	Pottery Recording and presentation Medieval glazed pottery - ware and manufacture - catalogue Medieval unglazed pottery - ware and manu- - facture - catalogue 1st century B.C. group and CP 1 group - ware and manu- - facture - catalogue	55
Chapter 6	Small finds Coins Jewellery, metal objects, faience, glass, carved stone	178
Chapter 7	Summary	
Chapter 8	Identifying spatial disorder - Roland Fletcher	188
Appendices	1. Summary of the architectural development of the late medieval fortress - Roland Fletcher	242
	2. Ambiguities and confusions relating to the architecture of the fortress - Roland Fletcher	244
	3. The inscriptions - Sebastian Brock	247
	4. Occurrence of shapes of pots in selected rooms of the late medieval fortress - Jon	250

PLATES

- Frontispiece. Taşkun Kale. View of part of site looking south.
1. R12. Gateway of the late medieval fortress. View E. Scale: 2 m.
 2. R11. Walls of room 36. View W. Scale: 2 m.
 3. S11. Walls of room 2. View SW. Scale: 1 m.
 4. S12. Clay objects in room 2. View N. Scale: 1 m.
 5. S12. Rooms 2 and 3. Note KP II blocking of doorway into tower. View SE. Scale: 2 m.
 6. S11. Rooms 5, 6 and 7. View NE. Scale: 2 m.
 7. S10. Room 12. Tandır and vent. View E. Scale: 0.30 m.
 8. R9. Rooms 29, 27, 24 and 22. View NE. Scale: 2 m.
 9. R10. Wall on S side of room 30. View S. Scale: 1.50 m. KP I surface runs under it.
 10. Q10 E. Tower room 31 showing KP II blocking. View E. Scale: 1 m.
 11. R10. Sunken area in room 32 with large storage jar CN 4318 (fig. 48, 16) in situ. View E. Scale: 0.50 m.
 12. R10. Room 32. View N. Scale (in room 30): 2 m.
 13. R11. Room 36. View SW. Scale (on fortress wall): 2 m. Church area beyond.
 14. R11. Room 36. View NE. Scale: 2 m.
 15. R11/12. Baulk. Carved stone re-used in gateway of fortress. A crude and largely ineffectual attempt has been made to remove the cross. View from above. Scale: 0.50 m.
 16. Q9 E. Curtain wall with earlier wall running from it diagonally SSW. The earlier wall was cut when the circuit was built and was retained as a buttress. View E. Scale: 0.50 m.
 17. R10. Christian burial. Head west. View N. Scale: 0.50 m.
 18. H21. Ashlar blocks of wall 5. View N. Scale in 10 cm. divisions.
 19. H21 W. Ashlar blocks in wall 5. View S. Scale: 1 m.
 20. H21. Blocks and footings of wall 5 (foreground) with CP 1 wall 4 (background). View SE. Scale: 2 m.
 21. K21. S (early) pier and CP 1 wall (1.). View S. Scale in dm.
 22. K21. N (CP 1) pier and footings. Top 1.: CP 2 rubble and mud mortar wall; above pier: CP 1 cemented stonework. View N. Scale: 2 m.
 23. K21. Pit containing horse's skull and two hooves. Nose points W. Scale: 0.50 m.
 24. K21. Inner apsidal face of wall 1, (CP 1, CP 2 above). View SE. Scale: 0.50 m.

25. K21. Outer (E) face of wall 1 (CP 1 and 2). View W. Scale: 2 m.
26. H21. Wall 4 (CP 1). Note threshold and jamb of re-used ashlar. View S. Scale: 1 m.
27. J22. Wall 10/11 (CP 1). Note moulded lintel block in foreground, and re-used jamb. View ENE. Scale: 2 m.
28. K21. Wall 1 (CP 1 and 2), inner face. Foundations exposed. View NNE. Scale: 2 m.
29. H21. Wall 4 and tiles (CP 1). View N. Scale: 1 m.
30. J22. Robbed wall 14 and tiled floor. View NE. Scale: 0.10 m.
31. J21, J22 and K21. General view of CP 2 church from SW. Kale in background and right.
32. J21. Chapel with carved stones in situ. View ENE.
33. Glazed pottery: l: white glaze with green blobs on rim CN124
c: white glaze sgraffito sherds with brown, yellow and green splashed CN108
r: blue glaze with black underpaint CN122
34. Glazed pottery: top row l. to r: sgraffito white and green glaze CN126, khakhi with yellow stripes CN127, sgraffito light green with brown splash CN59
centre: khakhi with light green stripes CN53
bottom, l. to r: sgraffito whitish glaze with yellow and green splash CN5, whitish glaze with green and brown splash CN99, sgraffito whitish with brown glaze CN16
35. Glazed pottery: green glaze and sgraffito green glaze
top l. to r: CN80, CN103, CN3, CN150
centre l. to r: CN118, CN2, CN142, CN1, CN77
bottom l. to r: CN110, CN115, CN102, CN137, CN147
36. Glazed pottery: brown glaze and sgraffito brown glaze
top l. to r: CN106, CN83, CN22
centre l. to r: CN133, CN130, CN104
bottom l. to r: CN132, CN8
37. Glazed pottery: sgraffito, whitish with green and brown glaze, green glaze and sgraffito green glaze
top l. to r: CN140, CN149, CN148
bottom l. to r: CN84, CN93
38. Glazed pottery: champlévé and sgraffito splash pottery
top l. to r: CN152, CN40, CN113
centre : CN157
bottom l. to r: CN156, CN144, CN140
- 39 & 40. Carved stones from chapel

FIGURES (CONTD)

- d. W section
- 24a. K21 N section
- b. S section
- c. W section
- 25. Section coding conventions
- 26. Proportions of green, brown and multicoloured glazes on 01 and 02 rimsherds
- 27. Numbers and proportions of medieval glazed, unglazed and Early Bronze sherds
- 28-82. Late medieval (KP I/II and CP 2/3) pottery
- 28-30. Glazed 02 pottery (kale)
- 31. Glazed 01 and 02 pottery (kale)
- 32-35. Glazed 02 pottery (kale)
- 36. Glazed 01 and 02 bases (kale)
- 37. Glazed 01 and 02 bases and C2 pottery (kale)
- 38. Glazed 05 and 01/2 fragments (kale)
- 39. Glazed 02, 05 and C2 pottery (church)
- 40. Glazed 01 and 02 pottery (L15) and glazed colour coding conventions
- 41-48. Unglazed C1 pottery (kale)
- 49-50. Unglazed C1 and C2 pottery (kale)
- 51-54. Unglazed C2 pottery (kale)
- 55-61. Unglazed C3 pottery (kale)
- 62-65. Unglazed 02 pottery (kale)
- 66-69. Unglazed 03 pottery (kale)
- 70. Unglazed 01 and 04 pottery (kale)
- 71-74. Unglazed XI pottery (kale)
- 75. Unglazed 0 and C bases (kale)
- 76. Unglazed X3-7 pottery (kale)
- 77. Unglazed moulded, stamped and incised sherds (kale)
- 78. Unglazed 01, 02 and 03 pottery (church)
- 79. Unglazed 03 and 05 pottery (church)
- 80. Unglazed C1 and C2 pottery (church)
- 81. Unglazed C2 and C3 pottery (church)
- 82. Unglazed C3 and XI pottery (church)
- 83. Unglazed X6, miscellaneous sherds and bases (church)

FIGURES (CONTD)

84-88. Hellenistic and CP 1 pottery

84. Hellenistic O2 and O3 pottery
85. Hellenistic O3, O and C bases, and C1-3 pottery
86. CP 1 and CP 1 (?); O2 and O1 pottery
87. CP 1 and CP 1 (?); O3, O4, C2 and C3 pottery
88. CP 1 and CP 1 (?); C3, C5, O and C bases, X3 and O4 pottery

89-92. Small finds

89. Jewellery and other metal objects
90. Metal implements and accoutrements and arrowheads
91. Faience and glass beads, carved bone, miscellaneous clay objects and glass

92-114. Spatial Analysis

92. Serial patterns of central tendencies
93. Variation trends
94. Relationship between serial patterns and variation trends
95. Class intervals and distribution shape
96. "Noise" effects and central tendency/variation descriptions
97. Splitting polymodal distributions
98. Merging of distributions
99. Visual ranges
100. Taşkun Kale. Room arrangement
101. Taşkun Kale. Distributions for spacings with median values less than 1 m.
102. Taşkun Kale. Sequence and frequency of medians 1 to 8 m.
103. Taşkun Kale. Visual range around doors
104. Taşkun Kale. Tandır and the circuit wall
105. Taşkun Kale. Visual ranges on roof and in courtyard. Final I
106. Taşkun Kale. Visual range in courtyard. Initial III
107. Taşkun Kale. Visual range in courtyard. Final II
108. Taşkun Kale. Proposed arrangement in Initial II
109. Taşkun Kale. Rooms requiring subdivision if dimensions greater than 5 m. are to be removed from the serial arrangement
110. Taşkun Kale. End State, <50% survival. Distributions, medians and 40% range values produced from walls with extant corners
111. Taşkun Kale. Proposed arrangement in Initial I

FIGURES (CONTD)

112. Taşkun Kale. Visual ranges out from the towers
113. Taşkun Kale. Visual ranges from tower parapets to ground level by the Main gate
114. Taşkun Kale. Comparisons of variation
115. Inscriptions
116. Occurrence of shapes by phase
117. Occurrence of catalogued pottery in rooms 2 and 4
118. Occurrence of catalogued pottery in room 5
119. Occurrence of catalogued pottery in room 6
120. Occurrence of catalogued pottery in room 7
121. Occurrence of catalogued pottery in room 8
122. Occurrence of catalogued pottery in room 30
123. Occurrence of catalogued pottery in room 32
124. Occurrence of catalogued pottery in southern sector or courtyard

End papers

1. Plan of kale
- 2a. Kale transect S12/S11/S10/S9/S8
- 2b. Kale transect Q10/R10/S11
3. Taşkun Kale. Sequence of additions and alterations
- 4a. Taşkun Kale. Sequence of distributions of room widths and lengths (a) condition
- 4b. Taşkun Kale. Sequence of distributions of room widths and lengths (b) condition
5. Taşkun Kale. Sequence of 40% range values
6. Taşkun Kale. Medians and 40% range. 0 to 8 m.

BIBLIOGRAPHY

- Aiello, J.R. & Aiello, T. de C. (1974) 'The development of personal space: proxemic behaviour of children 6 through 16', Human Ecology, 2, 177-89.
- Argyle, M. (1957) Bodily Communication. London.
- Aslanapa, O. (1962) 'Erster Bericht über die Ausgrabung des Palastes von Diyarbakir', Istanbuler Mitteilungen 12, 115-128.
- Atil, E. (1981) Renaissance of Islam: Age of the Mamluks. Washington.
- Bakirer, Ö. (1974) 'The excavations at Korucutepe, Turkey, 1968-70 Preliminary Report. Part VII: the Medieval Glazed Pottery', Journal of Near Eastern Studies 33, 96-108.
- Bell, G.L. (1913) Churches and Monasteries of the Tûr 'Abdîn and Neighbouring Districts. Heidelberg.
- Cherry, C. (1966) On Human Communication. Massachusetts.
- Clairmont, C.W. (1977) Benaki Museum: Catalogue of Ancient and Islamic Glass, based on the notes of C.J. Lamm. Athens.
- Crowfoot, G.M. & Harden, D.E. (1931) 'Early Byzantine and Later Glass Lamps', Journal of Egyptian Archaeology 17, 198-208.
- Dunand, M. & Duru, R. Qumm el-Amed: village hellenistique aux echelles de Tyre. Paris.
- Fehérvári, G. (1973) Islamic Pottery: A comprehensive study based on the Barlow Collection. London.
- Fletcher, R. (1977) 'Settlement Studies (Micro and Semi-Micro) in D.L. Clarke (ed.) Spatial Archaeology. London.
- Fletcher, R. (1980i) 'Space and Community Behaviour: Spatial order in settlements', in B. Lloyd and J. Gay (eds) Universals of Thought. Cambridge.
- Fletcher, R. (1980ii) 'People and Space: a case study on material behaviour' in N. Hammond, G. Isaac and I. Hodder (eds) Pattern of the Past: studies in Honour of David Clarke. Cambridge.
- French, D.H. et al., (1972) 'Asvan Excavations', METU Keban Reports I, 3, 552-62.
- French, D.H. et al., (1973) 'Asvan 1968-72: An Interim Report', Anatolian Studies XXIII, 69-307.
- Goldman, H. (1973) Excavations at Gözlü Kule, Tarsus. 1. Hellenistic through Roman periods. Princeton.
- Hall, E.T. (1966) The Hidden Dimensions. New York.
- Hall, E.T. (1968) 'Proxemics', Current Anthropology 9, 83-108.
- Hayes, J.W. (1972) Late Roman Pottery. Rome.
- Hayes, J.W. (1980) Supplement to Late Roman Pottery. Rome.
- Hillman, G.C. (1973a) 'Agricultural Resources and Settlement in the Aşvan Region', Anatolian Studies XXIII, 217-24.

- Hillman, G.C. (1973b) 'Crop Husbandry and Food Production', Anatolian Studies XXIII, 241-4.
- Howard-Johnson, James D. (1983) 'Byzantine Anzitenne' in Armies and Frontiers in Byzantine Anatolia (BAR International Series 156), ed. S. Mitchell.
- Kenyon, K.M. (1957) 'The Pottery from Samaria: Roman and Later Wares'. Crowfoot, J.W., Kenyon, K.M. and Suqenik, Samaria-Sebaste III: The Objects. London.
- Khatchatrian, A. (1971) L'Architecture arménienne du IV^e au VI^e siècle. Paris.
- Kraeling, C. (1938) Gerasa: City of the Decapolis. New Haven.
- Lane, A. (1937) 'Medieval Finds of al-Mina in North Syria', Archaeologia, LXXXVII, 19-78.
- Lapp, P. (1961) Palestinian Ceramic Chronology, 200 B.C - A.D. 70. Jerusalem.
- Lassus, J. (1947) Sanctuaires chrétiens de Syrie. Paris.
- McNicoll, A.W. (1972) 'Taşkun Kale N52/2', METU Keban Reports I, 3, 58-60.
- McNicoll, A.W. (1973a) 'Taşkun Kale', Anatolian Studies XXIII, 159-80.
- McNicoll, A.W. (1973b) 'The Asvan Hoard: Coins of two Cappadocian Monarchs', Anatolian Studies XXIII, 181-6.
- McNicoll, A.W. (1973c) 'Coins of the Asvan Project', Anatolian Studies XXIII, 187-90.
- McNicoll, A.W. (1974) 'Taşkun Kale 1973', Anatolian Studies XXIII, 6-9.
- Mitchell, S. (1980) Asvan Kale: Keban Rescue Excavations, Eastern Anatolia, (BIAA Monograph No. 1), B.A.R. International Series 80. Oxford.
- Margan, C.H. (1942) Corinth XI: The Byzantine Pottery. Cambridge, Mass.
- Newman, O. (1972) Defensible Space. London.
- Oates, D. & J. (1958) 'Nimrod 1957: The Hellenistic Settlement', Iraq XX, 114-57.
- Poole, S.L. (1877) The Coins of the Turkuman Houses...Catalogue of Oriental Coins in the British Museum. Vol. III. London.
- Poole, S.L. (1881) The Coins of the Mongols...Catalogue of Oriental Coins in the British Museum. Vol. VI. London.
- Rice, D. Talbot (1966) 'Late Byzantine Pottery at Dumbarton Oaks', Dumbarton Oaks Papers 20, 209-16.
- Riis, P.J. & Vagn Poulson (1957) Les verreries et poteries médiévales: Hama IV, 2. Copenhagen
- Scanlon, G.T. (1968) 'Fustat and the Islamic Art of Egypt', Archaeology, 21, 188-95.
- Schnyder, R. (1975) 'Keramik und Glasfunde vom Takht-i Suleiman 1959-1968', Arch.Anz. Heft 1.

- Shelkovnikov, V.A. (1958) Sovietskaya Arkeologiya 1-2, pp. 214-227.
- Thompson, M. (1954) Coins from the Roman through the Venetian Period: The Athenian Agora I. Princeton.
- Utudjian, E. (1968) Armenian Architecture: 4th to 17th Century. Paris.
- van Loon, M. (1973) 'Excavations at Korucutepe, Turkey, 1968-1970, Preliminary Report. Part I: Architecture and general finds', Journal of Near Eastern Studies 32, 357-95.
- Waagé, F. (1948) Antioch-on-the-Orontes IV, 1: Ceramics and Islamic Coins.
- Yakobson, A.L. (1959) 'Khudyestiennaya Keramika Bailakana (Oren-Kala)'. [Trudi Azerbajjanskoi Expeditaii], Materialii Issledovaniya po Arkheologii SSR 67, 228-300.

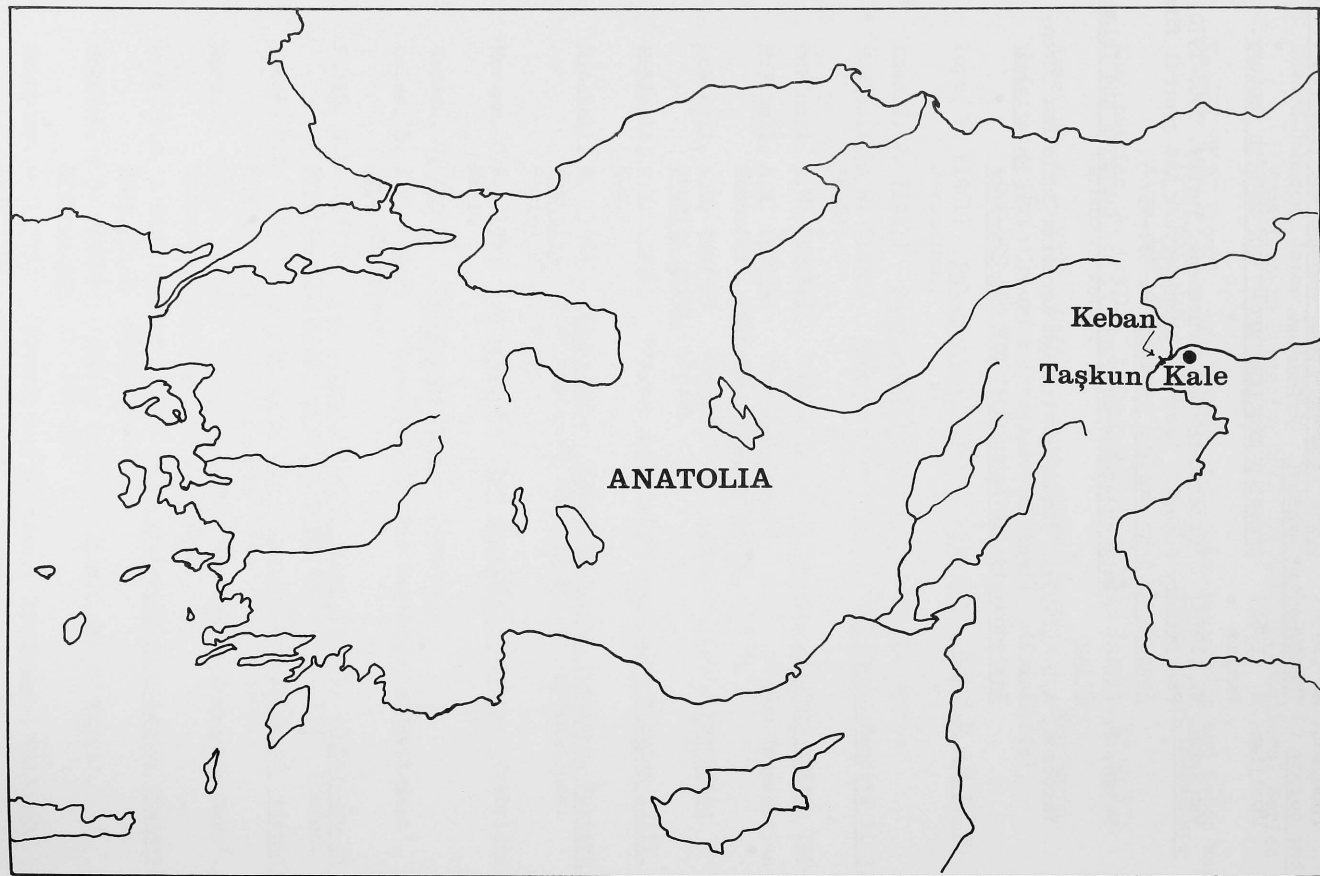
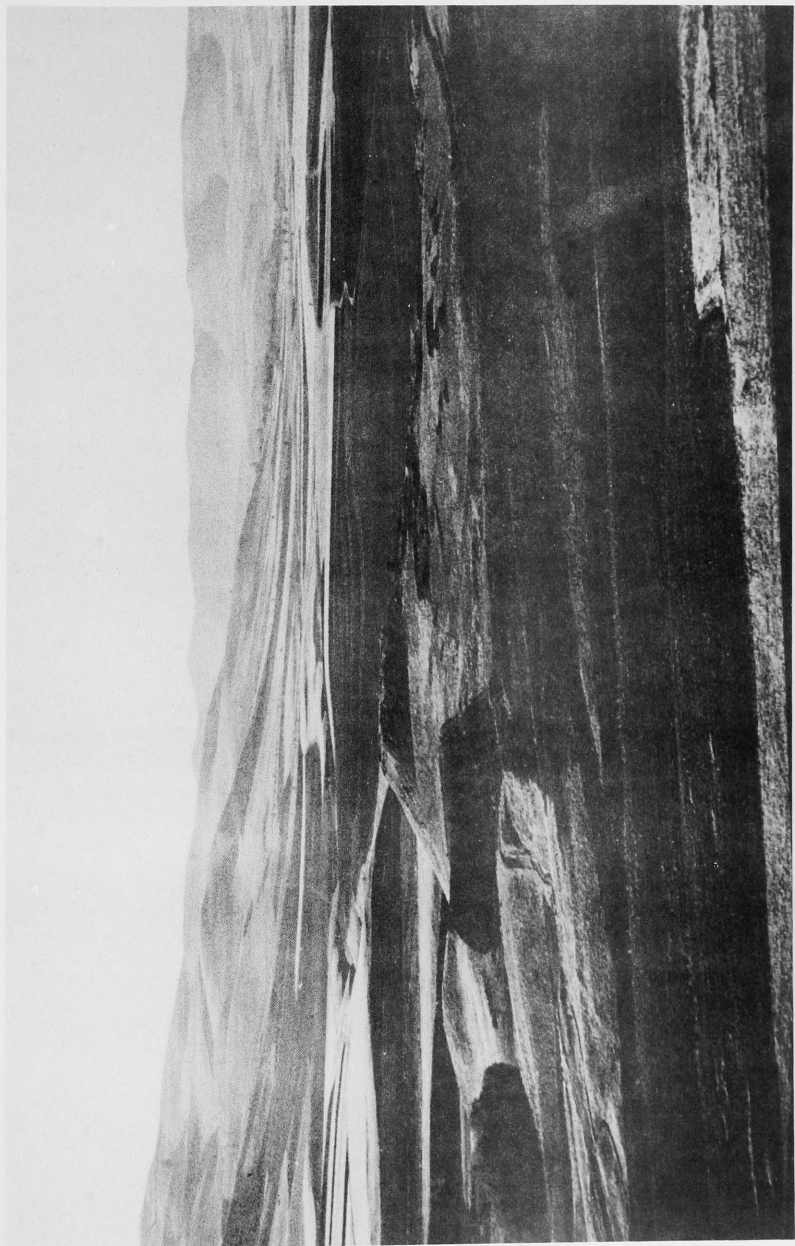


Fig. 1 Anatolia, showing location of Taşkun Kale



Frontispiece. View of Tashkum Kale, looking south (1973)

CHAPTER 1

THE EXCAVATIONS AT TAŞKUN KALE

Basic data (fig. 1)

Site name:	Taşkun Kale. Known locally simply as Taş Kale = Stone Castle or Fortress
District:	Elâziğ İli. Ancient Anzitene.
Height above sea level:	820-840 m. (approx.)
Mean annual rainfall:	833.2 mm. (Elâziğ)
Water supply:	Four springs and a perennial stream (Kuru Çay)
Mean annual temperature:	12.9° C. Lowest and highest mean monthly temperatures: Jan. approx. -2° C., July approx. 27° C. (Elâziğ)
Present condition of site:	Flooded
Former condition:	Agricultural land
Archaeological discovery:	Middle East Technical University survey 1967 - Site No. N 52/2
Extent of site:	10 ha. +
Excavation:	Aşvan Project of British Institute of Archaeology at Ankara, Director Dr David French Site Director Anthony McNicoll
Duration of excavations:	15 weeks (1970, 1971 and 1973)
Area excavated:	Approx. 2200 m. ² to between 0.50 and 2.50 m.
Excavational recovery technique:	1970-1 dry sieving to 5 mm. ² ; limited flotation 1973 trench recovery
Disposition of finds:	Elâziğ Archaeological Museum and Storeroom
Original notebooks, sections, plans, etc.:	British Institute of Archaeology at Ankara and The University of Sydney

Location¹

About 4 km. SSE of the village of Aşvan is the archaeological site of Taşkun Kale (frontispiece, fig. 2). It lies in the undulating up-land basin of the Aşvan district on the western side of the small

1. The following section is couched in the present tense. Strictly speaking most of it should be in the past tense.

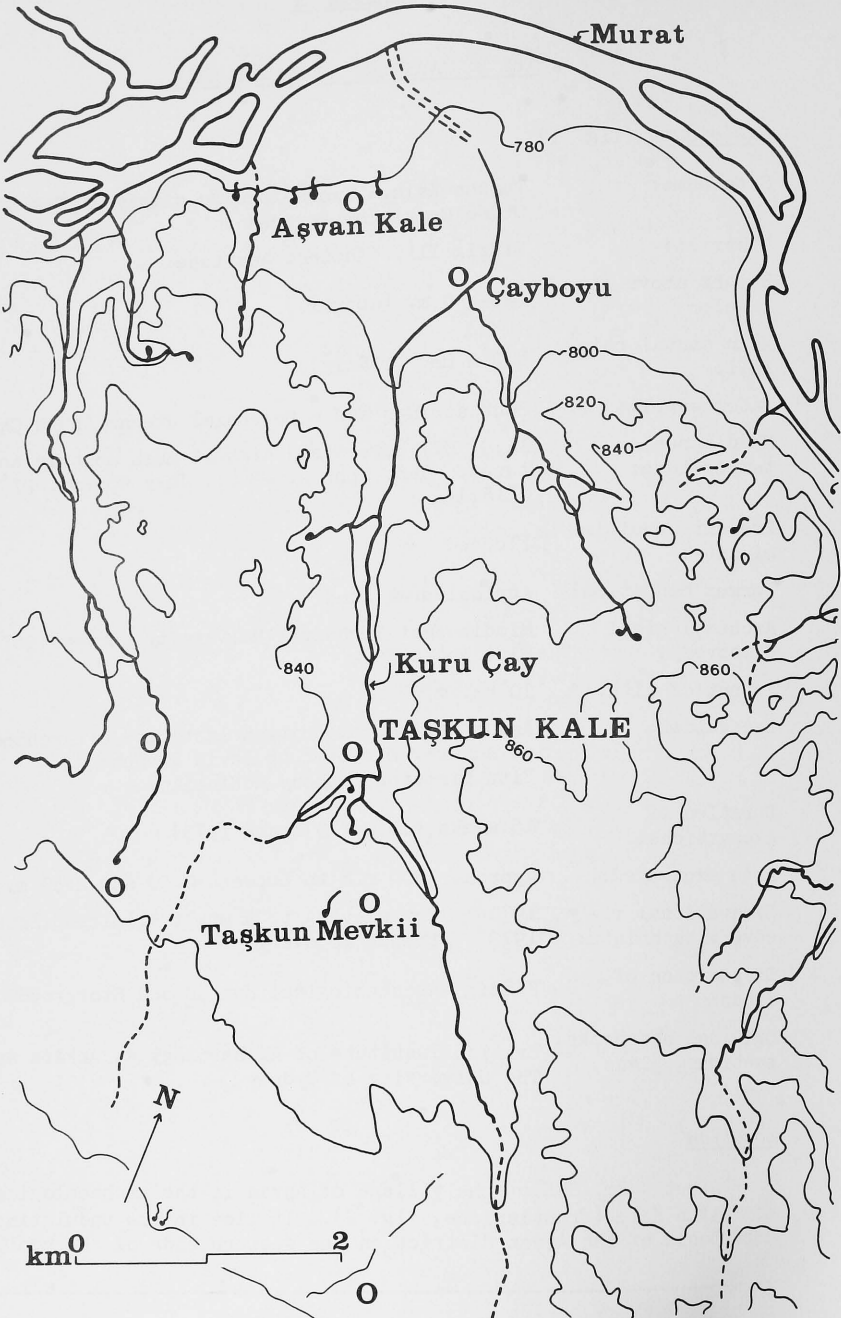


Fig. 2 Aşvan district

deeply cut wadi of the Kuru Çay. The Kuru is a perennial stream which flows in a generally north-south direction to enter the valley of the Murat through a wide and fertile fan of its own alluvium. In the immediate vicinity of Taşkun Kale are at least four springs; of these, two, just south of the kale, provide excellent sweet water. The Kuru Çay too is pleasant to drink. All in all Taşkun Kale was well supplied with water.

In recent times the site has not been occupied. Nearly all the land in the vicinity is dry-cropped, the exception being a small irrigated field of water melons on the east side of the Kuru valley. Sowing, mainly of wheat, occurs in the spring; by the time of our arrival in high summer only a parched stubble remains on the arid soil. In the vicinity there are few trees: in the fields lone thorn bushes sometimes provide minimal shade, while by the stream small stands of poplar and white mulberry flourish. While not under crops or snow, the fields around Taşkun provide good pasturage.

The landscape around Taşkun Kale has all the seasonal variety characteristic of the Anatolian plateau. In summer and autumn at midday the fields, dun, grey and yellow, shimmer in the heat-haze, and the only movement is the occasional dust-devil. In spring the countryside is emerald against a back-drop of snowcapped mountains; in the winter it is deep under snow.

The archaeological site of Taşkun Kale covers at least ten hectares of this undulating terrain. Its focal point is the kale proper, a flat topped mound about 50 m. N-S and 35 m. E-W; the overall extent of the site has never been precisely established, but surface potsherds, traces of walls and two sondages indicated that medieval occupation probably extended nearly 1 km. S of the kale, 250 m. west and perhaps 100 m. north (fig. 2). The occupation area was also defined by the vast numbers of loose stones which had formed the footings of the medieval walls; these stones are not a natural phenomenon in these upland fields, but are present as a result of human activity. They are densest on the kale and in its western and southern environs, suggesting that here the dwellings had been most tightly packed.

At approximately 840 m. above sea level, the kale proper is a high point in the neighbourhood, commanding fine views north across the Murat valley towards distant Çemişgezek and the Munzur Dağları beyond, and south-east past Aslanbey Hani to the low line of hills which forms the eastern watershed of the Kuru Çay. Over this watershed ran the old Elâzığ (Harput) Aşvan road; after passing through the site of Taşkun Kale it descended to Aşvan along the west flank of the Kuru Çay valley. Near Aşvan a ford or ferry enabled the traveller to cross the Murat and to continue journeying north to Çemişgezek. Over this road surveillance could be maintained from the kale, which was well placed to control the traffic moving along it. Although Aşvan and Taşkun Kale are not intervisible - even Aşvan hüyük was concealed from view behind the flanking hills of the Murat valley - a hillock called Tuğla Kalesi ("Tile Fortress") about 500 m. north of Taşkun Kale on the eastern side of the Kuru Çay gave a clear view to Aşvan and the Murat.

Thus the site of Taşkun Kale had certain civil and military attractions - water, cultivable land, pasturage and a reasonably defensible hillock from which to control the Aşvan/Harput road. However, the

nearby site of Aşvan appears to have two distinct advantages. As Hillman points out (1973: 236), on the uplands around Taşkun "irrigation agriculture could not have been practised on a scale in any way comparable to Aşvan". Market gardening on a large scale would have been impossible at Taşkun Kale without intensive and continuous labour. Furthermore, although a garrison at Taşkun Kale could watch over, and if necessary block, the road to Aşvan, only from Aşvan itself could control be exercised over the Murat crossing.

Although our excavations provided no certain explanations for the sporadic occupation of Taşkun Kale (can archaeology ever?), they did reveal sufficient data to enable us to propound a few hypotheses. These are set out in the summary, chapter 7.

Aims, Excavation Techniques and Analysis

Taşkun Kale was dug primarily to fulfill an aim of the Aşvan Project, viz to present the most complete picture possible of settlement through time in the Aşvan district. To this end four sites in the area were excavated as part of the Project (fig. 2). An important aspect of the excavations on all these sites was the application of clearly definable mechanical standards of data recovery to provide a common interpretive basis.

The aims of chronological definition and precise quantification were paramount in the 1970 and 1971 seasons at Taşkun Kale, and mechanical recovery was the rule. All excavated soil was dry-sieved through shakers with 5 mm² meshes; in 1971 a few samples were recovered by water flotation. Excavation was meticulous and slow with much brushing and trowelling.

The initial aims having been largely fulfilled by the end of the 1971 season, the final season of excavation, 1973, had additional goals. While the chronology of the kale was reasonably clear, building plans were so fragmentary as to make little sense. An aim therefore in the final season was to excavate whole buildings, i.e. 'area excavation'. To this end pick and shovel were used with a will. Further aims were to ascertain the depth of occupation on the kale, and to establish the extent of occupation over the site. In the final season only selected deposits were put through the sieves: trench (i.e. subjective) recovery was the rule.

As is to be expected on a rescue dig, not all the goals or desiderata of the Taşkun Kale excavations were attained. Mechanical standards of recovery were not applied throughout the dig. A 4 m. deep sondage on the kale failed to reach virgin soil. Another sondage 700 m. south of the kale (R80) produced evidence of habitation, but the edges of the settlement were not unequivocally established. There were also some regrettable omissions. No attempt was made to recover a complete house plan. No investigations were made at the nearby site of Tuğla Kalesi. Only four trenches were dug outside the two major areas of excavation. Methodical sherding of the Taşkun Kale area was neglected.

Dig strategies and priorities and post-excavational events have created inconsistencies which cannot now be resolved. For example, whilst both the Aşvan and Taşkun ceramic material is presented

according to shape, Stephen Mitchell's treatment of the pottery from Aşvan Kale (1980: 69 f.) differs markedly from mine in some ways, such as lack of recording of shape frequencies, and definition of wares of the unglazed pottery. Here, therefore, I have taken an independent line. On the other hand, I have borrowed shamelessly from his discussion of the glazed wares (Mitchell 1980: 73-75); the work of Bakirer (1974: 96-108) has also influenced me. In retrospect, more attention should have been paid to problems such as standardized ceramic classification and recording between all Aşvan Project sites.

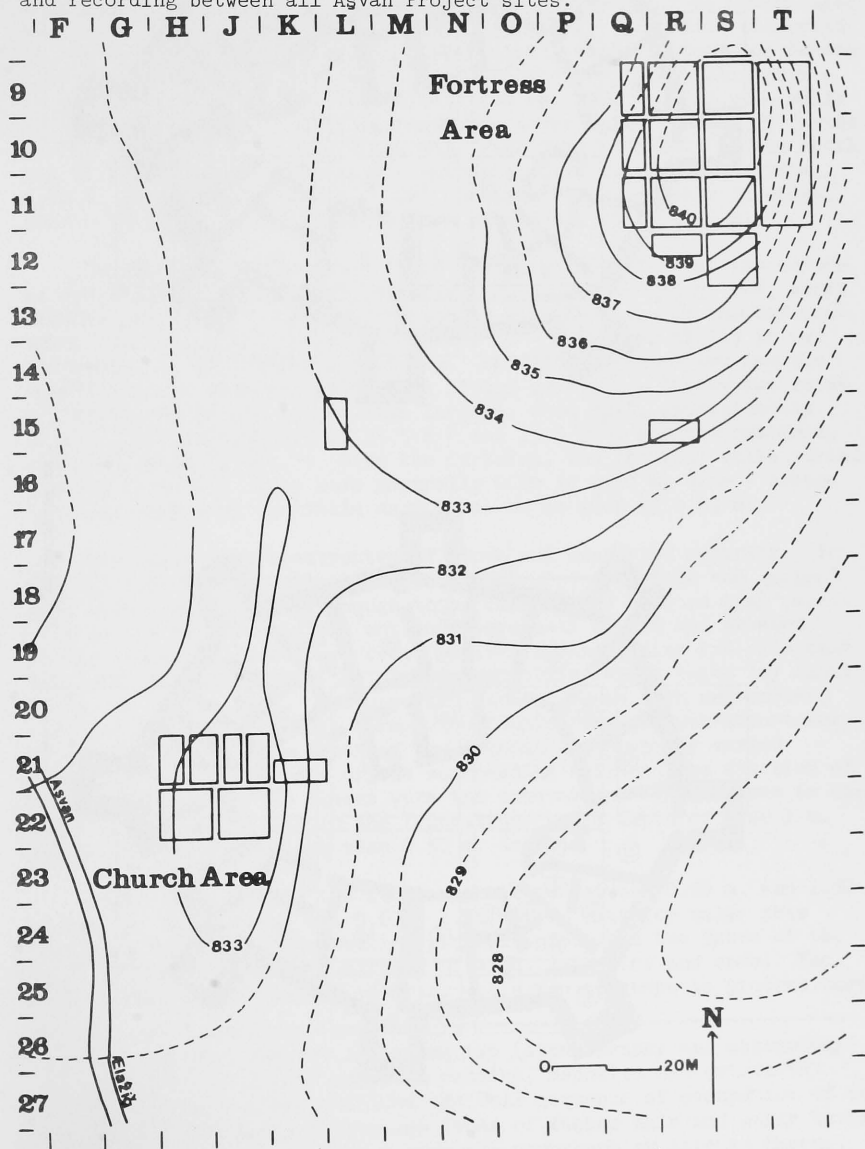


Fig. 3 Taşkun site, location of trenches

THE KALE

Architecture¹

The medieval fortress (plan, end paper 1) occupied the whole of the Taşkun Kale hüyük. Its fortifications consisted of an oval-shaped enceinte, approximately 40 m. N-S and 33 m. E-W, from which projected at least five, and possibly as many as eight, small rectangular towers (fig. 4). Only one tower (room 3 in S12) was completely uncovered - it projected 3.30 m. from the curtain and was 4.20 m. wide with walls 1.30 m. thick. The less well preserved tower in Q9 E (room 25) seems to have had a more massive front wall over 2.00 m. wide. At the south end of the fortress was a single entrance, 2.00 m. wide at maximum, 1.42 m. at narrowest (pl. 1). The curtains varied greatly in width, from 0.95 m. to 1.80 m., with a norm of about 1.20 to 1.35 m.

In the first phase (Kale Phase I - hereafter KP I) at the centre of the fortress was an open courtyard, 22 m. N-S and 15 m. E-W, whose regular oval-shaped layout corresponded with the line of the defence-wall. In the second phase (Kale Phase II - hereafter KP II) it was encroached on by various structures. Between the courtyard and the fortifications were the garrison's living quarters - thirty-two rooms of various sizes and shapes, the largest, room 32/4, approximately 50 m.², (possibly two rooms 34.5 m.² and 15.5 m.²) and the smallest, room 27, about 3.75 m.². Like the curtains, the internal walls varied greatly in width; they were generally 0.60 to 0.70 m. wide - exceptionally they were as little as 0.50 m. or as much as 1.05 m.

The walls were constructed of stone and sun-dried mudbrick. In general the stones (mostly limestone, with some sandstone and gabbro) were unworked, and small enough to be carried and handled with ease. Only in the curtains by the entrance were well shaped and dressed ashlar blocks of limestone used; their size and finish indicate that they were plundered from the classical building whose ruins lay about 150 m. SW of the kale. The unworked stones, bound with mud mortar, and laid in rough courses, formed the foundations and sub-structures of all the walls. The depth of the foundations probably varied according to the firmness of the surrounding soil and the function of the wall. Only at two places were the excavations carried down to the bases of the wall; in Q10 the foundations had a depth of over 1 m. and in S10 they were less than 0.50 m. deep.

Above ground level the stone work stood between 0.20 m. and 1.50 m. . . . high. The usual range was 0.60 - 1.20 m. In exterior walls this free-standing stone construction probably protected the bases of the walls against the eroding effects of wind, rain, ice and snow. The same technique was used on interior walls too, perhaps to protect them

-
1. This section and the following two (stratigraphy and chronology) deal only with late medieval remains, deposits and artefacts. The fourth section outlines the full sequence of occupation of the hüyük. The Early Bronze Age finds of Taşkun Kale and other Ağvan Project sites will form a separate monograph by Antonio Sagona.

from general wear and tear, or perhaps simply from habit. Occasionally the free-standing stone courses are laid in a rough herring-bone pattern (pl. 2). Nowhere in the kale did wall plaster - lime or mud - survive.

Above the stonework the walls were constructed of sundried mud-bricks about 0.35 m. x 0.22 m. x 0.09 m. Bricks survived in situ in only two places - on the internal walls in S11/12 (pl. 3), and in the enceinte wall in T9-11. As with the stonework, the mudbricks were bound with mud mortar.

It is possible that timber ties were used in the mudbrick superstructure, but no traces of wall woodwork were found. Nor (apart from doors) were wall apertures such as windows or archers' slits found. The height of the walls was probably about 4 m., based on the following calculations taken from R10 (fig. 5):

- Approx. average depth of deposit above floors in rooms 30 and 32 (including walls) 0.60m., and in courtyard approx. 0.50 m.
- Room area (including walls) approx. 48 m.², courtyard area approx. 33 m.²
- Soil content of rooms approx. 28.8 m.³, and of courtyard approx. 16.5 m.³ Total: 45.3 m.³

Approx. area covered by walls: 11.5 m.²

Therefore height of walls $\frac{45.3}{11.5} = 3.9$ m. approx. Adding 0.50 m. as the average height of the stone socles and deducting the same amount for the roof mud, the wall height was probably somewhere around 4 m., or more if there has been significant degradation on the site.

The roofs, almost certainly flat, were of packed mud carried on joists, small timbers and possibly matting. Carbonised remnants of roof joists were uncovered at the south end of the kale. No tiles were found. There is no evidence to suggest any changes in roof height; however, if, as Roland Fletcher suggests (Ch. 8), the strip of roof immediately behind the curtains served as a chemin de ronde this sector may have been thicker and stronger than the rest of the roof. Access to the roof was probably by ladders, although the stone base on the south side of R10 has no foundations and may have served to support a staircase of wood or pisé.

Evidence of interior fittings and furnishings is limited to the ubiquitous tandirs (ovens), traces of carbonised timber, a single room partly paved with stone slabs, a few pits with or without storage jars and some mysterious sundried clay objects in room 2 (pl. 4).

Only at the entrance of room 4 was clear evidence of a timber door found - remnants of beams and boards accompanied by iron fittings, in the wall a stone jamb and on the floor nearby a stone pivot socket. Although no physical traces of the actual fortress gate survived, grooves and pivot-holes in and behind the stone threshold blocks are evidence that the entrance was secured by a gate with double leaves. Various explanations for the absence of doors elsewhere in the fortress can be put forward. In the burnt southern sector of the fort the fire and consequent collapse may have pulverized door timbers beyond recognition. Alternatively the doorways may have been closed by woven mats or reeds, or left open. In the unburnt northern sectors the timbers,

if any existed, may have been stripped from the fort after its abandonment.

The uses to which each individual room in the kale was put cannot be stated with certainty. It is more than likely that most of them were multipurpose - as in many areas of the world today.

<u>Room No.</u>	<u>Functions</u>	<u>Reasons</u>
1	Vestibule/guardroom	Proximity to entrance
2	?Occasional use involving liquids/living	Fragile clay objects including troughs and channels on floor, storage jar in corner (pl. 4)
3	Cooking/living/defense	Ovens (pl. 5)
4	Corridor with steps to roof	Too narrow for living?
5	Corridor/steps to roof or storage/cooking	Oven at entrance. Blocking wall to form 'pantry', or as support for stairs

Rooms 2-5 may have formed a self-contained unit, secured from the courtyard by the door at the west end of room 4. If this is correct the tandir outside the door would have been used by the occupants of the unit in hot weather, and the tandirs in 3 and 5 would have been used in cold weather. If rooms 2-5 were self-contained, room 4 would have given access to the roof and room 5 have served as a storage and cooking area.

6	Semi-outdoor cooking (summer use)	Not fully enclosed (?), oven
7	Forecourt to 8, secured by door between 6 and 7	Paving may indicate this room was not roofed (pl. 6)
8	Living/cooking/storage	Two storage jars and oven Possible pantry in continuation of 5
9	Living/cooking	Two storage jars and oven
10)	Living/cooking	Oven, storage jars
11)		

Rooms 6-11 may have formed a self-contained unit.

12	Living/cooking	Oven, place in SE corner for storage jar (?) (pl. 7)
13	Living/cooking	Oven, storage jar
14	?Living/cooking	Oven, place in SW corner for storage jar (?)
15	Living	
16	Living/cooking	Oven

Rooms 12-16 may have formed one or two units in the second phase only.

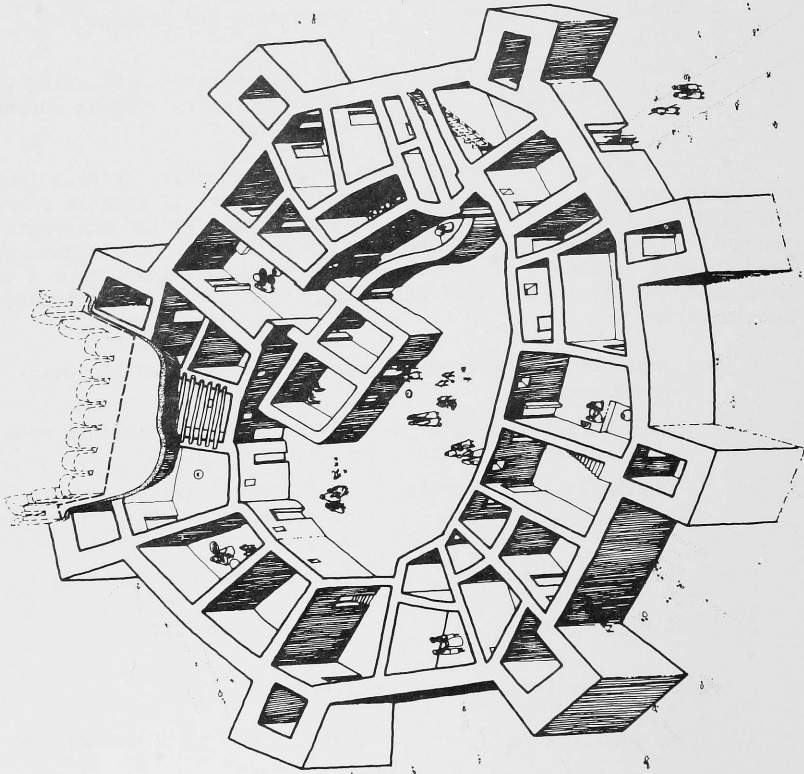


Fig. 5 Reconstruction - birds-eye view of kale from SW

<u>Room No.</u>	<u>Functions</u>	<u>Reasons</u>
17)		
18)		
19)	Living/cooking	Tandirs in each room and storage jar in 19
20)		
21	Living?	Only partially excavated
22	Vestibule	Phase II only (see below, p. 22f.)
Access to, and interconnections between, rooms 17-22 are uncertain, because of the heavy erosion in the NE sector of the fortress.		
23	Living/cooking	Eroded and only partially excavated. One oven
24	Storage/stable/vestibule	Note very narrow entrance. Possibly access to room 20
25	Living?/defence	
26	Living/cooking	Eroded
27	Storage/stable	Self-contained (pl. 8)
28	Living/cooking	Oven
Rooms 25, 26 and 28 may form a self-contained unit, with 27 as a storage room or stable with access from the courtyard. Numbers 23 and 24 may have been part of this unit or separate and self-contained. If there was no doorway from room 24 to room 23, the latter may have been reached through room 26.		
29	Vestibule, storage	Apparently gave access to 30 (pl. 8)
30	Living/cooking/access to roof in KP II?	Oven, storage jar and possible staircase against S wall (pl. 9)
Rooms 29 and 30 probably constitute a self-contained unit.		
31	Defence/living (KP I only?)	Only partially excavated (pl. 10) Doorway blocked in KP II
32/34	Living/cooking	Four ovens, one storage jar (pls 11 and 12)
33	Storage/stable	Access only from courtyard
35	Defence/living	Not fully cleared
Rooms 31-35 probably formed a self-contained unit.		
36	Living/cooking/guard room?	Oven - second oven (KP II?) for use in good weather at door. Somewhat narrow compared with normal living rooms (pls 13 and 14)

To conclude the description and analysis of the late medieval kale a few general observations and hypotheses can be made.

1. The fortress was probably physically isolated from the surrounding community. North, west and south there appears to have been a narrow area of clear space. Eastwards the steep slope to the Kuru Çay was probably unoccupied.
2. In addition to its defensive function the fortress served as a dwelling place. Although in fig. 5 women, children and pets are

shown, it is impossible to tell whether only soldiers inhabited the fortress or whether they had with them their families. A reused limestone block from which the carved cross had been smashed (pl. 15) suggests that the inhabitants of the fortress were not Christian.

3. The fortress was not a refuge for the whole community. It was too small. Probably it was imposed on the inhabitants.
4. The fortress was not intended to withstand serious siege. The 'permanent' water containers would scarcely contain enough water to last more than a day or two. Perishable containers, if there were any, would be unlikely to have been used extensively for long term storage. It follows that the fortress was not built to withstand a serious military threat but to provide a safe home for a group of outsiders (?) functioning as a local police force. The Desert Police posts of Jordan or the Jandarma posts of Eastern Turkey may provide modern parallels.
5. The fortress was not intended to be self-sufficient: its occupants were not involved in agriculture. Neither agricultural tools nor grindstones were found in the fort. Presumably flour and other necessities were supplied, purchased or taken. Some sheep or goats may have been kept.
6. The rooms in the fortress which may have served as stables are too small for equids. The garrison was probably made up of foot-soldiers. If there were cavalrymen, they would have had to stable their horses outside the fort. This seems unlikely.
7. Before the construction of the fortress the kale hüyük was radically modified; fortunately wall stumps outside the enceinte in Q9 E (pl. 16) and R12 (pl. 1) survive to show that there was occupation on the kale between the Bronze Age and the late medieval period.
8. If there was a basic unit of measurement which applied to the construction of the fortress it was probably in the order of 65-70 cm.
9. Following the fire which ended KP I, the doorways into the tower rooms 2 and 31 were blocked. Possible the fort no longer operated as such, but was merely used as a dwelling place.
10. There is no evidence that the final abandonment of the fortress area in the late medieval period was anything other than peaceful.
11. During KP II, or more probably after the final abandonment of the Taşkun Kale hüyük, a Christian was interred in a shallow grave in R10 (pl. 17).

Stratigraphy of the late medieval kale

The late medieval occupation of Taşkun Kale consists basically of a single horizon, in all probability spanning a period of no more than a generation (see below, p. 19). However, stratigraphically two phases, Kale Phase I and Kale Phase II (KP I and KP II) may be discerned, divided in the south-eastern sector by a minor catastrophe - a fire. The duration of each phase could not be defined.

There are four major medieval and post-medieval deposits:

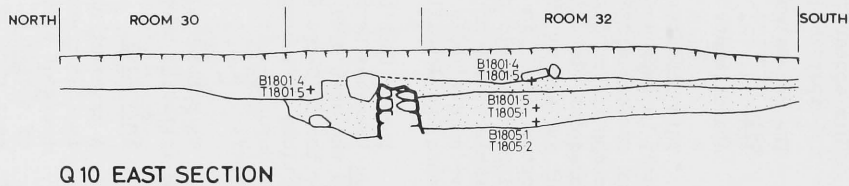
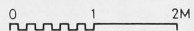
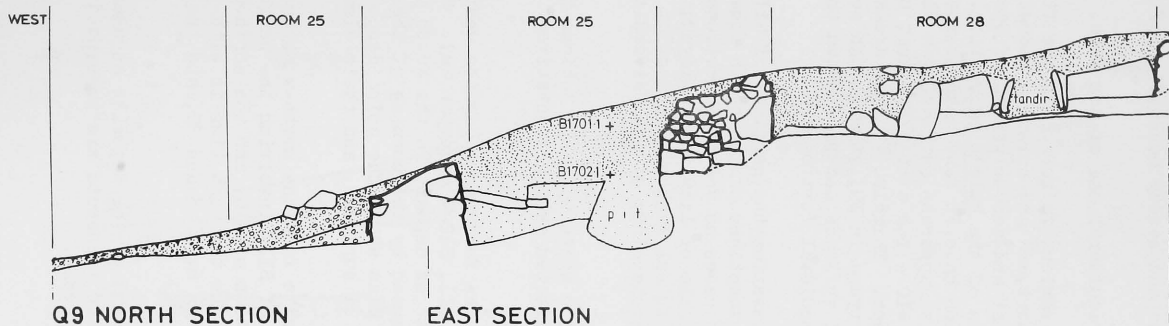


Fig. 6a Q9 N and E sections
6b Q10 E section

1. The walls and floors of the initial construction and occupation of the kale (KP I).
2. The destruction of the south-eastern sector of the kale by fire. This appeared in excavation as a layer of burnt material and collapsed and decayed mudbrick.
3. The reconstructions, alterations and second occupation of the kale (KP II).
4. Abandonment, denudation and agricultural use of the site.

This picture is complicated by various factors. In the first place, in many areas (notably the courtyard and northern rooms) the same surface served for both the first and second phases of occupation, perhaps indicating the short duration of the kale's occupation. Secondly, subsequent ploughing and/or denudation have in many cases removed the real surface of KP II, leaving only an apparent surface at a depth of about 0.15 m. In some areas - e.g. S10 - the striations left by the point of the ploughshare could be seen. Thirdly, in some areas (for example at the north end of the courtyard in S9), the plough seems to have removed both the KP II and KP I surfaces and penetrated the Early Bronze Age deposits underlying the medieval fortress.

During the three seasons of excavation the sections of all the kale trenches were drawn, with the exceptions of the north side of S8 and the east side to T9-11. In both cases no vertical sections existed. For the 1970 and 1971 sections the scale of 1:10 was employed; in 1973 sections were drawn at 1:20. All original Taşkun Kale section drawings are deposited in the Department of Archaeology of The University of Sydney.

To publish all the sections would waste space in tedious repetition. The following have therefore been selected as representative:

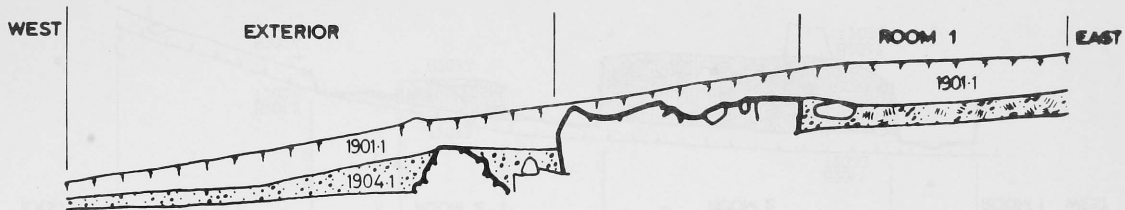
A. Transects

1. A transect north-south through the fortress along the west side of the 'S' trenches (S8, S9, S10, S11, S12 - endpaper 2a). This transect shows the greater depth of deposit in the south sector of the kale, notably in S11, caused by the burning of the south-east part of the fortress. It also shows the coincidence in S9 (courtyard) of the KP I and KP II surfaces, and their disappearance in S8 (room 21).
2. A zig-zag transect across the site from the north-west corner of Q10 E to the south-east corner of S11, involving the north sections of Q10 E and R10, the east section of R10, and the north and east section of S11 (endpaper 2b). The transect ties in with the analysis of vessel types in rooms 6, 7, 8 and 30, and the south part of the courtyard (Appendix 4).

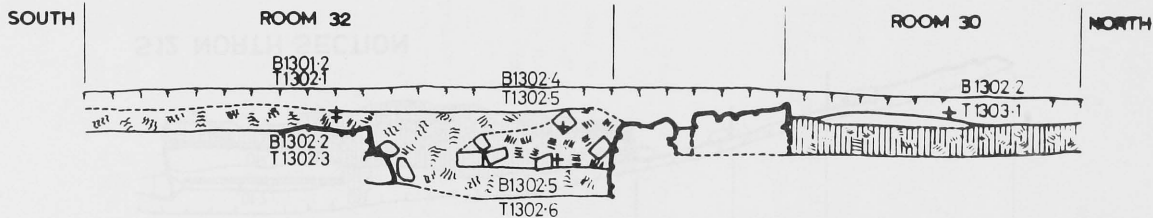
Because of the general shallowness of the deposits as against the length of these combined sections, the transects are presented with a vertical scale twice the horizontal scale.

B. Individual sections

Fig. 6a Q9 north and east sections. These show the terracing of the hüyük which accompanied the building of the medieval fortress (see below, p. 22f.).

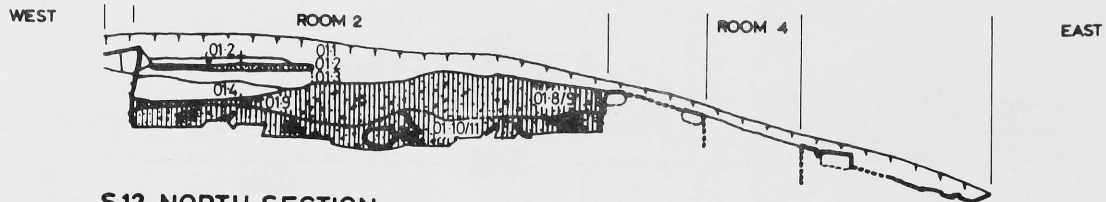


R12 NORTH SECTION

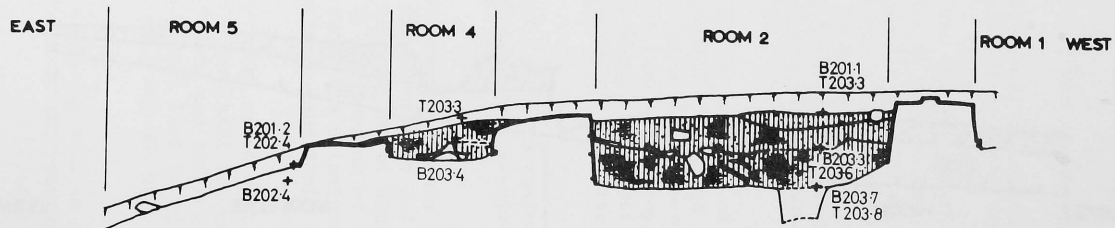
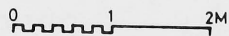


R 10 WEST SECTION

Fig. 7a R12 N section
 7b R10 W section



S12 NORTH SECTION



S11 SOUTH SECTION

Fig. 8a S12 N section
8b S11 S section

- Fig. 6b Q10 east section. Shows the absence of the wall on the south side of room 30.
- Fig. 7a R12 north section. Shows the defence wall of the kale and the earlier (i.e. pre-KP I) wall outside it.
- Fig. 7b R10 west section. Shows the base of the wall or staircase on the south side of room 30 and its relationship with the wall on the north side of room 32. As can be seen clearly, the south feature of room 30 is clearly later than the north wall of room 32.
- Fig. 8a S12 north section, and fig. 8b. S11 south section. Both these sections show the curious sun-baked mud objects found in KP I of room 2 (pl. 4).

The conventions used on these sections are shown in fig. 25. Each cross indicates the exact location of a label and a T or B following its area and level numbers indicates top or bottom of the level, as dug.

The kale trenches were dug and recorded with varying degrees of skill and care in different years. Endpapers 2(a) and 2(b) and figs 6-8 show the sections as they were actually drawn, inconsistencies, 'hanging lines' and all. Dotted lines represent post-excavation rationalizations.

Dating

The dating of the kale rests on the pottery and the coins. Of the former, the glazed sgraffito ware has been found on numerous Levantine sites (e.g. Tarsus, Eski Kâhta, Korucutepe - for a full discussion and bibliography see Mitchell 1980), and it may be dated with reasonable confidence between 1200 and 1400 AD. The common ware pottery has been so little published from other sites that, apart from Aşvan, there is no corpus of material to compare with the Taşkun unglazed pottery. The bulk of the comparable Aşvan material is dated by Mitchell to the 12th and 13th centuries, (his Medieval II), but some similar material appears in Medieval III also. The chronological span of the plain pottery of the Aşvan district seems, therefore, to be greater than that of the glazed ware, as might be expected. The dating of the pottery is discussed further in Chapter 5. It seems reasonably clear, however, that the span of two hundred years or more suggested by the pottery is considerably greater than the duration of the kale's occupation, which, to judge by the depth of occupation detritus and floor surfaces, may have lasted less than one generation and certainly no more than two.

Only the coins may enable us to date the occupation of the kale within closer limits. Of the seventeen coins found on the kale eight were identified either tentatively or certainly. One was 11th century Byzantine, and the other seven were Ilkhanid. In view of the fact that the Byzantine coin was minted earlier than the t.p.q. of the pottery, we may assume either that it is a stray or chance loss, or that perhaps, as at Aşvan, Byzantine coins continued to circulate centuries after they were struck. The seven Ilkhanid coins, while forming far too small a sample to give us absolute certainty, at least fall within the chronological parameters suggested by the pottery. The four coins which can be positively identified were minted in the reign of Abū Sa'īd (1316-1335); the tightest possible date for the kale's medieval occupation would thus appear to be about the first third of the 14th century. The presence of a couple of coins possibly struck in the

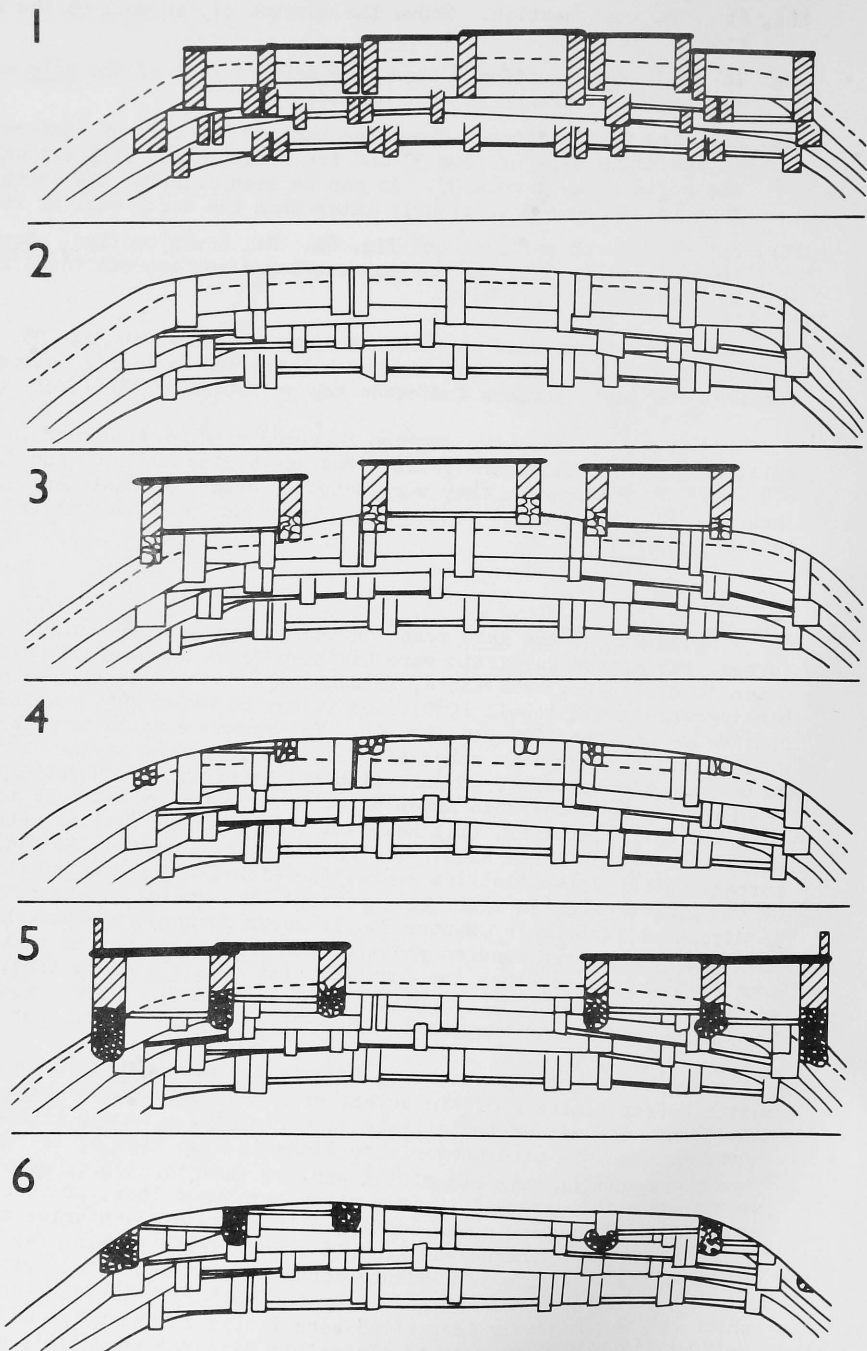


Fig. 9 Schematic sequence of occupation on the kale.
 1. EBA, 3. Classical, 5. Medieval
 Dotted line 1-5 shows present-day surface

reign of Abū Sa'īd's predecessor, Ūljaītū (1304-1316), would not contradict this, but it is of course possible that the end date could be rather later than the end of Abū Sa'īd's reign. It seems likely, then, that the fortress of Taşkun Kale was built, occupied and abandoned within the half-century 1300-1350 A.D.

Sequence of occupation of the hüyük

None of the trenches or sections of Taşkun Kale hüyük shows the full sequence of occupation of the site. This is because, in general, we had time only to carry the excavations down to the early phase (KP I) floors of the medieval fortress. The schematic sequence fig. 9 is reconstructed from observations in the director's and site supervisor's notebooks and from plans and sections. In summary, the sequence of occupation consisted of five major periods - prolonged habitation in the 3rd millennium; desertion in the 2nd and most of the 1st; occupation in the classical and/or byzantine periods; another period of desertion; the late medieval fortress, and finally the reversion of the area to agricultural and grazing land. The evidence for the various stages varies in quality and quantity.

1. The Early Bronze Age is well attested by the excavations in S9, where a small sounding 2.00 m. x 1.50 m. penetrated through 4 m. of 3rd millennium deposits without reaching virgin soil. A much shallower sounding 3.00 m. x 1.50 m. in S11 also penetrated into the Early Bronze Age deposits. EBA sherds occurred in almost every late medieval deposit. The Early Bronze Age occupation of Taşkun Kale is to form part of a monograph on the Aşvan Project Bronze Age finds by Antonio Sagona.
2. There is no evidence whatever that the site was occupied during the 2nd and most of the 1st millennium. Nor did we find any traces of natural accumulation of wind-blown soil or humus during this period of desertion. Since we found the occasional EBA sherd at the foot of the hüyük above the floor of the Kuru Çay valley it seems more likely that the mound suffered the degradation characteristic of Near Eastern sites during periods of abandonment, rather than the aggradation characteristic of northern sites.
3. The occupation of the Greco-Roman period has left scant traces. The stumps of two walls in R12 and of a wall in Q9 - all three in areas outside the medieval circuit and clearly earlier than it - were the only evidence for the occupation of the hüyük between the EBA and late medieval periods. Elsewhere on the kale, in the soundings which penetrated the medieval layers into earlier strata in S9 and S11, and where earlier deposits were exposed inadvertently (S10), there was no trace of any occupation between the EBA and medieval. The few wall stubs found may therefore be the sole survivors of a building or buildings which was/were totally obliterated and disposed of in the course of the terracing operations which preceded the construction of the fortress.

There are only three ceramic fragments from Q10 (CN4337) and R10 (CN4279) and T9-11 (CN4359) which suggest a date for these wall remains. CN4337, a body sherd with high red gloss paint and well levigated pink fabric was perhaps manufactured in the 1st century B.C. However, it may originate from the major area of classical occupation located at H, J and K (ch. 3). The same may be true

of CN4279, a base of fine orange ware with red paint, which could date about the same time. On the other sherd, found in T9-11 (CN4359), is an Aramaic inscription of the late Parthian period which is discussed by Sebastian Brock in Appendix 3.

4. The construction of the late medieval fortress on the hüyük at Taşkun Kale first necessitated the levelling of the site to provide a flat courtyard area - the site presumably having been round-topped until this time. This levelling and terracing was probably carried out before, during and after the construction of the enceinte wall, and, in the northern sector at least, before the construction of some or all of the interior walls. This is deduced from the fact that the few areas of infilling behind the enceinte which were examined produced mostly EBA material; if there were in fact a classical or Byzantine building which was razed to create the flat courtyard, all the material associated with it must have been dumped outside the circuit wall line. This clearance could have been achieved most easily before the wall was raised far above ground level. As to the subsequent construction of interior walls, it can be observed that the KP I surface of Q9 apparently runs under both the wall on the east side of tower room 25 and the wall on the south side of room 28 (fig. 6a).

Along with Q9, R9 gave the clearest evidence of terracing. Merle Langdon, who supervised R9's excavation, wrote in the trench notebook:

"Rooms 24, 27 and 29 seem to open to the courtyard, and the walls (which divide the rooms from each other) simply stop where the courtyard begins. There is also a great disparity of level between the rooms and the courtyard, the floors of the former being some 0.30 m. below the level of the latter" (R9 notebook, p. 11, 30 July 1973).

Five days later he notes (R9 notebook, p. 19) that:

"There must have been small retaining walls at the court(yard) sides of rooms 24, 27 and 29, but no traces of them were found in excavating. One pile of stones just where room 29 ends and the court begins may represent what was the terrace wall there".

It is possible that the terracing of the north-west sector of the kale was roughly carried out contemporaneously with the building of the southern (initial) part of the fortress. The building of the northern part would then have followed, with a sufficient time lapse to allow deviations from the original plan. This is most clearly visible in the positioning of the south wall of room 21, which, as Roland Fletcher has noted (ch. 8) does not accord with the line of the rest of the wall dividing the habitation areas from the courtyard. My own view is that, because of the deviant construction of the south wall of Room 21, a rough depression, excavated initially, was left immediately outside it. This probably collected rainwater and drift snow from the courtyard, which was 0.50 m. higher, and would have been a nuisance to the occupants or users of room 21. So in KP II the wall to the east and south of the area marked 22, was constructed and some levelling 'fill' was thrown in behind it. My own summary of the problem (R9 notebook, p. 143, 12 Sept. 1973) is as follows:

"The surface (of room 22), which is rock-hard and

incontrovertibly medieval, appears to run under the wall (on the south and east side of room 22) - not against it (as Langdon suggested) . . . My own idea, then, is that the wall was a 2nd phase wall, added to prevent the terrace from collapsing.

In the first phase the terrace would have been simply a drop. Since such a construction has obvious drawbacks, the addition of stonework is not surprising".

It should be added that this wall was constructed with only one face, towards 22, to a height level with the surface of the courtyard. Whether it was carried up to support a roof over 22 or whether it simply acted as a retaining wall is uncertain.

5. Following the abandonment of the fortress and the collapse and degradation of the mudbrick walls, the site became a field, which was uncultivated during the period of our investigations. However the indications of ploughing referred to above (p. 15) showed that it had been cropped at some period before the introduction of mechanical deep ploughing.

THE CHURCH AREA

Architecture¹*The building of the late hellenistic period.*

The earliest building found in this area dates to about the first century B.C. (late hellenistic phase -- below, p. 39f). The precise date of its construction and the duration of its use are uncertain. Indeed very few fragments of it were unearthed, and what was found was often in later contexts. It was superseded by a Christian building (Church Phase 1 - hereafter CP I).

Only in K21, H21 and H21 W (plan, fig. 10) were architectural elements of the late hellenistic period found in situ. In the 'H' trenches one or two courses of limestone ashlar walling survived. So far as could be judged (for the wall had been severely tampered with during the rebuilding operations of the CP 1) it measured approx. 0.77 m. in width. The ashlar (pls 18 and 19) were not large (e.g. approx. 65 x 41 cm., 75 x 56 cm., 56 x 56 cm.), and have neat joints and carefully worked comb-toothed faces. The wall was dry-built and probably had two independent faces with an infill of clay and rubble. The interior of the wall had been gutted by the digging of graves in the CP 3. Too little survived to say whether the masonry was isodomic. One example of keying was found. The wall foundations were roughly 1 m. deep and projected about 10 cm. beyond the face of the wall. On the south side (i.e. inside the building) the foundations were probably concealed, for here simple cobblestones were used. However on the north side there was a narrow course of ashlar blocks about 0.17 m. deep which was decorative as well as functional (pl. 20).

Like the subsequent walls in this area the late hellenistic wall in H21 and H21 W ran roughly east-west. It was pierced by a doorway (width approx. 2.20 m.), but probably did not constitute the front wall of the building. The front wall and main entrance probably faced east. Excavation in K21 inside the apse of the church brought to light two piers, the southern built of well-shaped ashlar similar to those forming the door jamb of the 1st century B.C. wall in H21 and H21 W (pl. 21). The late hellenistic surface shown in fig. 24c appeared to run up to this pier; and it is likely that these southern ashlar are part of an earlier structure than the north pier, which dates to the CP 1 (pl. 22). About 2 m. north of this pier (i.e. wellnigh on the line of a possible threshold?) was a pit which contained a horse's skull and two hooves cut into virgin soil (pl. 23). It seems possible that this offering marks the location of the main entrance.

Evidence for the form of the building of the late hellenistic period is next to non-existent, because of the extremely limited area

1. The following discussion of the church area's architectural sequence is based mainly on architectural rather than clear stratigraphical interrelationships. As will be seen (below, p. 36 f.) the stratigraphy in this area was badly disturbed.

dug to the earliest strata (approx. 15 m.²). Probably it was rectangular or square in ground plan with sides at least 15 m. long. Possibly like its successor it had paired walls on the north and south sides, but if this were so, the inner line was entirely destroyed by the builders of the CP 1 structure. If it had double wall lines, it may have had a circumambulatory corridor, in the manner of the 2nd century A.D. 'Shamash' Temple at Hatra, or, in the Aşvan district, like the building of the 1st century A.D. excavated by Stephen Mitchell on the mound at Aşvan.

Concerning the possible appearance of the building in elevation we can hazard no views, apart from guessing that the absence of suitable columns at Taşkun Kale must indicate that it was not colonnaded and trabeated in the Greco-Roman mode.

The function of the building is equally uncertain. Near Eastern archaeologists are notorious for the frequency with which they advance religious or cultic explanations for the inexplicable. Following this well-established custom it may be suggested that the classical period building at Taşkun was not domestic, and possibly religious. There are four reasons for this proposal:

Firstly, the style of the masonry, and the care and skill involved in the working of the stone, contrast strongly with architecture and materials of the contemporary settlement at Aşvan Kale (Mitchell 1980, 35-41), where the basic elements were mudbrick and unworked stone.

Secondly, the pit containing the horse's head and hooves, unique in this area, can have few explanations which do not involve ritual.

Thirdly, in all three areas where late hellenistic deposits were excavated, a layer of fine brown soil 0.80 - 1.10 m. deep was found overlying the virgin soil (figs 19 and 24). This deposit had no obvious structural purpose, and its sherd content was slight by comparison with other layers. (H21 1204.11 and .12: 68 fragments; H21 W 1209.5 and .6: 75 fragments; K21 103.10-.13: 264 fragments). Possibly this clean deposit was introduced by the builders to purify the site.

Finally, as Alan Hall points out, the later churches may be evidence of the religiosity of the place; in Anatolia and Armenia churches were sometimes founded on formerly pagan sites in order to 'lay the ghosts' and to demonstrate the power of the new religion.

Even if it is allowed that the building in H-J-K/21-22 may have been religious, there is no evidence to whom it was dedicated. Its probably non-classical form and the sacrifice use of the horse in the foundation deposit suggest a non-Greco-Roman divinity. Given the eastern influences in this area we should look for a deity in the Persian or Parthian pantheon; cf. Strabo XV.3.15: "In Cappadocia there are many temples of the Persian gods". To judge by Aşvan and Taşkun, the same may have been true of Sophene and Anzitene.

The horse sacrifice of the Iranians is well attested by ancient authors (Cumont 1899: 126, n. 4) and was often related to the sungod (Shamash, in this instance?). Alternatively, the proximity of the

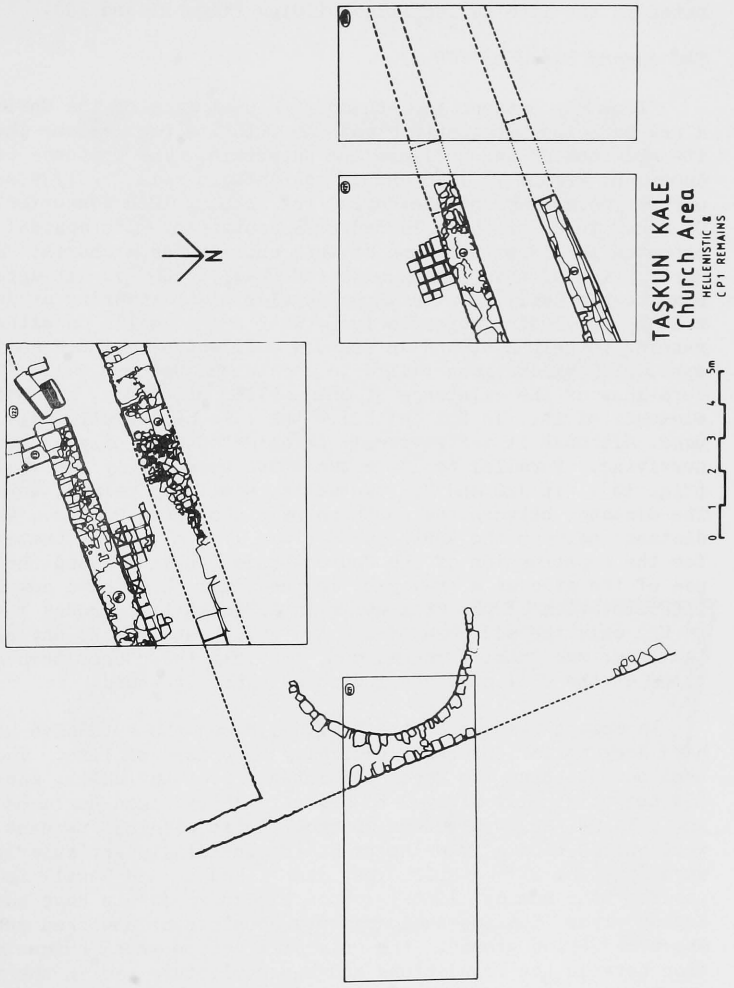


Fig. 10 Plan of classical and CP I remains

building to springs and running water suggests that the goddess Anahita may have been honoured here.

Apart from the ashlars described above, no architectural elements can be ascribed with certainty to the building of the classical period. The voussoir block, architrave (?) moulding, and pilaster capital described below in the section on CP 1 remains may possibly have originated in the late hellenistic building (figs 11 and 12).

The second building (CP 1)

Probably between the 4th and 6th centuries of the Christian era a new building was constructed. As with its predecessor the date of its abandonment and collapse are uncertain. The presence of the Anonymous Bronze TK 70/6 and of the Artuqid coin TK 71/49 suggest occupation at Taşkun Kale during the 11th or 12th centuries. The CP 1 may therefore have lasted some centuries. Its apsidal east end prompted the identification of this building as a church; hence the description of this phase as Church Phase 1 (CP 1). It appears to have been a basilica with a rectangular plan measuring at least 20 m. x 14 m. (excluding dependencies), with paired walls on either side running roughly E-W, and an eastern wall which included an inscribed apse. The excavations failed to locate the western wall. The builders knew of the existence of the earlier structure, and utilized elements of it. In H21 and H21 W the late hellenistic wall was reused, although it was extremely delapidated with only a course or two surviving. Parallel to it to the south an entirely new wall was erected (fig. 10). In J22 and H22 two walls, similarly paired, were built. The distance between the northern pair was about 2.00 m., whereas the distance between the southern pair was 1.50 m. Unfortunately robbing for the construction of the Church Phase 2 building and the subsequent use of the area as a graveyard in the final phase have complicated the interpretation of the CP 1 walls in J22 almost to ground level, while in H22 only the southern of the two walls survives to any extent; the other was totally robbed out, and only the robber trench and the tiles of the CP 1 surfaces indicated where it stood.

A common feature of the CP 1 walls was the extensive use of a hard grey mortar, probably basically comprised of lime. The mortar was used both to bind the faces and interiors of the walls, and sometimes (if not originally always) to decorate the exposed surfaces as a pointing (pls 24, 25). A second characteristic was the frequent use of well-worked blocks from the preceding building, particularly at doorways (pls 26, 27) - thresholds, jambs, and in the S wall in J22/H22 possibly the moulded lintel. Such blocks appear to have been used at angles also. But the basic masonry consists of unworked rubble, both above and below ground; the only distinction in technique of construction between the foundations and superstructure was in the care with which a regular vertical face is maintained in the latter, and in some places in the way the cement render is applied - as in the E wall of K21. The stones, which are generally small in size - between 10 and 30 cm. - do not always appear from the faces to have been laid in courses, but in J22 the robbing of stones from the S wall (10/11) has left a well-nigh level bed of cement, indicating that at least in some places coursing was used (pl. 27). Wall widths vary from about 1 m. (wall 4 in H21/H21 W and wall 10/11 in J22) to 1.33 m. (wall 14 in J22). The E wall 1 in K21 measures about 1 m. at its narrowest.

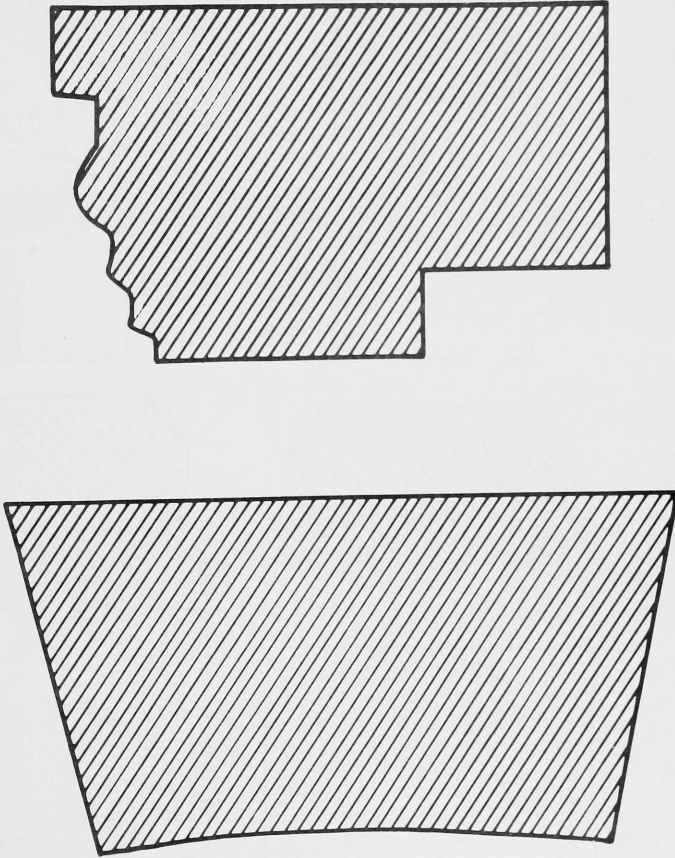


Fig. 11 Voussoir and architrave blocks from church area
Scale 1:5

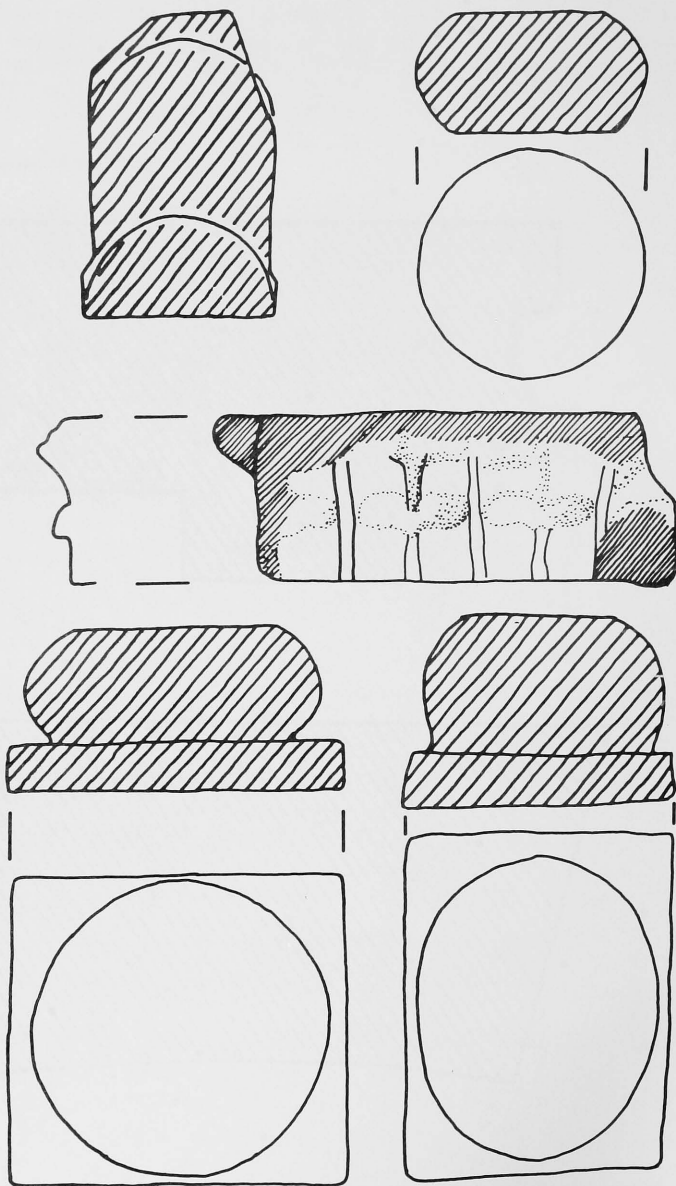


Fig. 12 Column fragments: shaft, bases and pilaster capital
Scale 1:10

The nature of the superstructure of these walls - whether mud-brick, pisé or stone - and their original height are unknown.

In the four places where the full depth of the foundations of the CP 1 walls was revealed, it measured more than 1 m. The greatest depth recorded, beneath the inner face of wall 1 in K21, was about 1.50 m. (pl. 28). The foundations were sometimes trench-built; sometimes after a trench-built bottom section there was a step-back of about 15 cm. so that the upper part of the foundation could be built in a more controlled fashion.

Oven-fired tiles, measuring 0.40 m. x 0.33 m. x 0.02 m. were found in situ in H21, H22 and J22 (pls 29, 30); although only small patches survived, they were sufficient to indicate that between H21 wall 5 and J22 wall 14, between J22 wall 14 and J22 wall 10/11, and south of wall 10/11, the floors were tiled. The tiles were made in a form, and occasionally have shallow finger-impressed saltires, either for decorative reasons or more probably as a result of the potter removing them from the form in a leather hard state. They were fired to a dark red colour. In H21 and H22 the tiles were simply laid on a bed of hard packed clay; such a surface, without any trace of tiling, was found in K21, but whether it had never been tiled or whether the tiles had been removed was unclear. Elsewhere, in J22, the tiles were provided with a more substantial bed: a layer of river pebbles, mostly blue, set in a hard grey cement akin to that of the walls. The reason for the stronger treatment is uncertain; perhaps more traffic and hence more wear were expected in this area.

The building was roofed with ceramic pan and roll tiles (imbrices and tegulae). No unbroken specimens of either sort were found among the thousands of fragments excavated, but it is likely that the pan-tiles were 0.45-0.50 m. x 0.32-0.36 m. and 0.028 m. thick, and the semi-circular tiles 0.12-0.15 m. wide. The tegulae were made in forms, like the floor tiles, and sometimes had similar shallow finger-impressed grooves (fig. 88). Firing rendered them buff to orange in colour. No trace was found of the woodwork of the pitched roof of which these tiles formed the cover. The tiles themselves lay in profusion over the CP 1 surfaces in those places where there was no disturbance by the wall robbing and rebuilding in CP 2, or by the grave-digging in CP 3.

It is impossible to be absolutely certain that the architectural elements shown on figs 11 and 12 were originally part of the CP 1 building. Some, such as the voussoir block and the moulding, may have formed part of the late hellenistic building. The pilaster capital and the column bases may with reasonable confidence be ascribed to the CP I building, although the latter seem too small to have served as the bases for a ground floor colonnade. Possibly they served as part of a clerestorey arcade; the absence of any columns, capitals or bases of reasonable dimensions leads one to the conclusion that there were piers of masonry in the Armenian fashion rather than a Syrian-style colonnade.

Fig. 13 shows the restored plan of the basilica of CP 1. Some of the elements - principally the location of the piers and the west wall - are hypothetical; obviously these two are interdependent. Another element of which our excavations found no trace is the stylobate

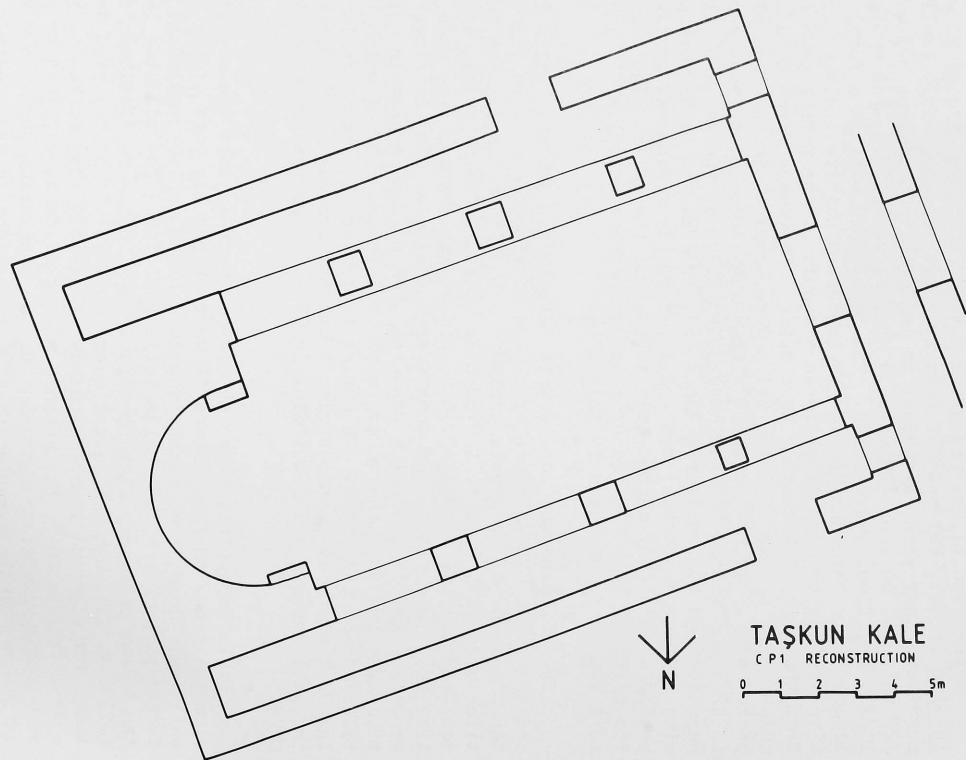


Fig. 13 Restored plan of CP 1 basilica, with alternative locations for west wall

on the north side of the nave; it might have been expected to be visible in the east section of H21 where the CP 1 surface is shown (below, fig. 19), but this was an area of appalling disturbance - fourteen graves were defined in an area south of wall 4 totalling 15 sq. m. (area 1202), and in the words of the site supervisor, Mary Frost Pierson, what wasn't grave was "a jumbled mess of stones" (H21 notebook, p. 47). on p. 55 of the same notebook she wrote: "The complicated outlook of the trench is due to the disturbance of the walls and (associated) layers caused by the grave cutting". If there had been a pre-CP 2 robbing of a CP 1 wall hereabouts, that robber trench would have been obliterated in the subsequent grave digging of CP 3. The surface marked as CP 1 on the east section of H21 may therefore be in part a layer within or at the bottom of a later grave or robber trench.

There are three anomalies in the restored plan (fig. 13). In J22 the stylobate wall 14 is 0.33 m. wider than wall 10/11. But in order to preserve the symmetry of the aisles (1.50 m. wide) the northern stylobate is shown as 1 m. wide. The second anomaly is the location of the doorways leading into the aisles through the N and S walls - the northern door is considerably further west than its counterpart. And the third anomaly is in the projection of the south pier into the apse. Possibly the earlier building is responsible for all these anomalies.

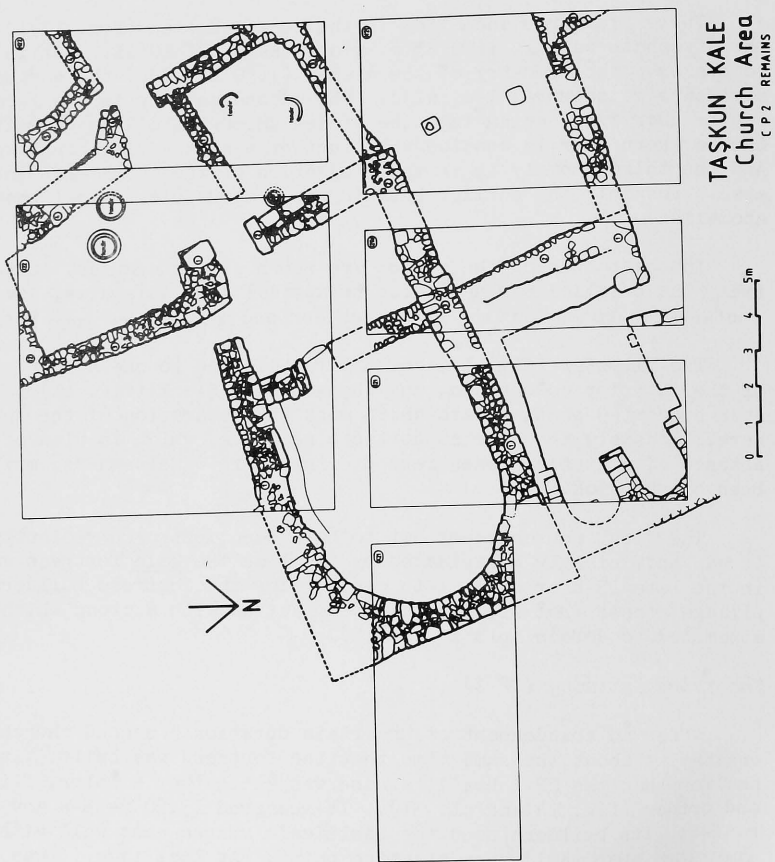
The east ends of the aisles are shown as rectangular. Alternatively the basilica may have been triapsidal; in this area, however, rectangular rooms serving as diaconicon and pastophory seem possible.

The pilaster (fig. 12) could have belonged to one of the responds of the interior colonnades, and the voussoir block (fig. 11) to an arch supported on the piers which mark the separation of the apse and nave. Possibly the apse supported a hemidome, which in view of the absence of suitable stones reused either here or elsewhere, may have been of mudbrick.

The first church seems not to have been destroyed violently. But it was sufficiently delapidated by the time the kale fortress was built in the late 13th or early 14th century for the fortress builders to pillage stones from it, including one carved with a cross which they attempted to deface (pls 13 and 15).

The third building (CP 2)

After an abandonment of uncertain duration a second church was erected at about the same time that the fortress was built. It was smaller than the CP 1 basilica, and was altogether simpler, flimsier and cruder (fig. 14 and pl. 31). It measured 13.20 m- E-W and 7.60 m. N-S; its builders used the basilica's ruined east wall with its inscribed apse (K21) as a starting point. At that time it was still standing about a metre high; the flattish stones above the cement-pointed wall are probably part of the new building, selected and laid with care to level up the ruined wall. Above them can be seen the characteristic crude mud-bound rubble construction of CP 2 (pls 25 and 31). The upper works of the CP 2 walls were almost certainly pisé (no mudbricks were found in the body of the church), and the roof may well have been flat, with packed mud carried on timbers. Although pan and roll fragments of CP 1 type were found frequently in CP 2 strata, they



are certainly rubbish survivals.

The first entrance to this church was in the NW corner; later, in CP 3, this doorway was blocked, and a door opened in the south wall. Internally the building had three subdivisions, but not in the tripartite manner of the CP 1 basilica. The westernmost division (the women's assembly room?) measured 5.30 x 3.30 m.; it was blocked off from the main body of the church and from the altar by a wall. It is unclear whether the wall stood to the full height of the building, but its width makes this perfectly possible. This wall was penetrated by an off-centre door 0.85 m. wide. The second room to the east is slightly larger (4.40 x 5.30 m.), and has mudbrick and pisé benches about 0.45 m. wide and 0.20 m. high along its N and S walls. Its eastern extent was demarcated by a low, crudely constructed screen wall in CP 3, the final phase; no trace of any CP 2 screen wall was found. In the apse stood the altar, which was a re-used column base of CP 1 (?); it was set on a column drum and tipped on its side so that the torus faced the wall. The floor of the church consisted of mud.

During the CP 2 a second Christian structure, a bi-apsidal chapel, was built (J21 and J21 W), adjoining the north side of the church. It measured roughly 10.50 m. E-W and 6.70 m. N-S, including the party wall. Its east end was formed by the wall of the CP 1 basilica, while new rubble-built walls with clay mortar 0.80 - 0.85 m. wide were built on the north and west sides. Mudbrick was used to construct walls against the interior faces of the west and south walls; that at the western end of the chapel is about 1.10 m. wide, whilst the southern one was only 0.44 m. wide. The two apses were also constructed in mudbrick within the outer stone walls. Most of the bricks, like those of the kale, measured 0.35 x 0.22 (or 0.44) x 0.09 m., but a number of bricks are rather thicker - 0.12 m.

The apses were 1.40 m. (N) and 1.30 m. (S) wide, and about 2 m. long. Their floors were raised 0.50 m. (N) and 0.33 m. (S) above the level of the hard-packed yellow clay floor of the body of the building, which generally had a thickness of about 1 cm. and which overlaid a hard mud basis. The walls were also coated with a similar clay; the junction between wall and floor was neatly rounded. The steps leading from the body of the chapel to the apses were pisé.

In the middle of the floor was a column base set on the clay coating; opposite it, against the S wall, was a small mudbrick pilaster. The distances to be spanned by the roof timbers of the chapel were thus considerably less than those of the church - a maximum E-W of about 3 m. and N-S of little more than 2 m. A flat timber and mud roof seems probable.

The mudbrick additions within the chapel may in fact post-date the abandonment of the church. If so, they may well date to CP 3. The condition of the church's interior when excavated was one of decay and damage, as if the elements and other forces of destruction had been at work for a considerable time once the roof was off. By contrast the chapel appeared to have been intentionally filled in after an orderly removal of valued re-usable elements. (In this area timber in particular may have been taken for re-use). Excavation revealed carved stones neatly placed upon the chapel floor (fig. 15a, pl. 32), which was in much better condition than the floor of the church. What

remained in the church was by comparison higgledy-piggledy. Another indication that the church was abandoned some time before the chapel is the presence of a burial within the church. It must be admitted that the burial pit was not located until the excavation penetrated the CP 2 surface, but on the basis of its depth one may be reasonably confident that it occurred in CP 3, and that it belongs to a period when the church was derelict.

The chapel entrance was in the NW corner. A door in the N wall 0.75 m. wide led with two steps down into the room. The only other furnishings were the rectangular stone font 0.35 x 0.25 m. and 0.10 m. deep recessed into the N wall close to the northern apse, and the two altars in the apses, the northern one consisting of a column base of CP 1 set torus down on a column to form a flat-topped structure, and the other of a simple rectangular block.

Adjoining the west end of the chapel was a porch consisting of a timber and mud roof set on flimsy cement and stone pillars. It was 4.75 m. wide and 4.75 cm. deep. Although abutting on the chapel's W wall the porch served the CP 2 entrance of the church. Later, presumably after the blocking of this doorway and the opening of the door in the Church's south wall late in CP 2 or in early CP 3, the porch was destroyed, and numerous burials occurred in this former thoroughfare and place of shelter.

During CP 2 various rooms were built to the SW and W of the ecclesiastical complex. Numerous tandirs (ovens) within these rooms indicate a domestic function. The ruined state of some of these tandirs and the use of one of them for an infant burial indicates further that some of the rooms were probably abandoned late in CP 2 or early in CP 3. Fig. 16 shows a reconstruction of the church area in the CP 2.

The Graveyard

Possibly during the period when the church was still in use in CP 2, the first interments occurred in the areas south of the building in J22, east of it in K21 and west of it in H21/H21 W. Stratigraphically it was impossible to distinguish between burials of CP 2 and CP 3; what can be said is that the graveyard (which may have extended to the north of the complex as well) became increasingly crowded as time went by. Burial cut into burial cut into burial - the nett result being jumbled masses of broken bones. Frequently only the skulls (themselves often fragmentary) indicated how many bodies had been buried in a given area. This was particularly so in J22, where the whole trench S of the church was a chaos of skeletal fragments to over a metre's depth (plan, fig. 17; fig. 23, E and S sections). Evidently there was little respect for the remains of earlier burials.

The totals distinguished in the church area trenches were as follows:

H21	19 extramural burials
H21 W	7 extramural burials
J22	28 extramural burials and 1 child burial in a <u>tandir</u>
K21	5 extramural burials and 1 adult within the church

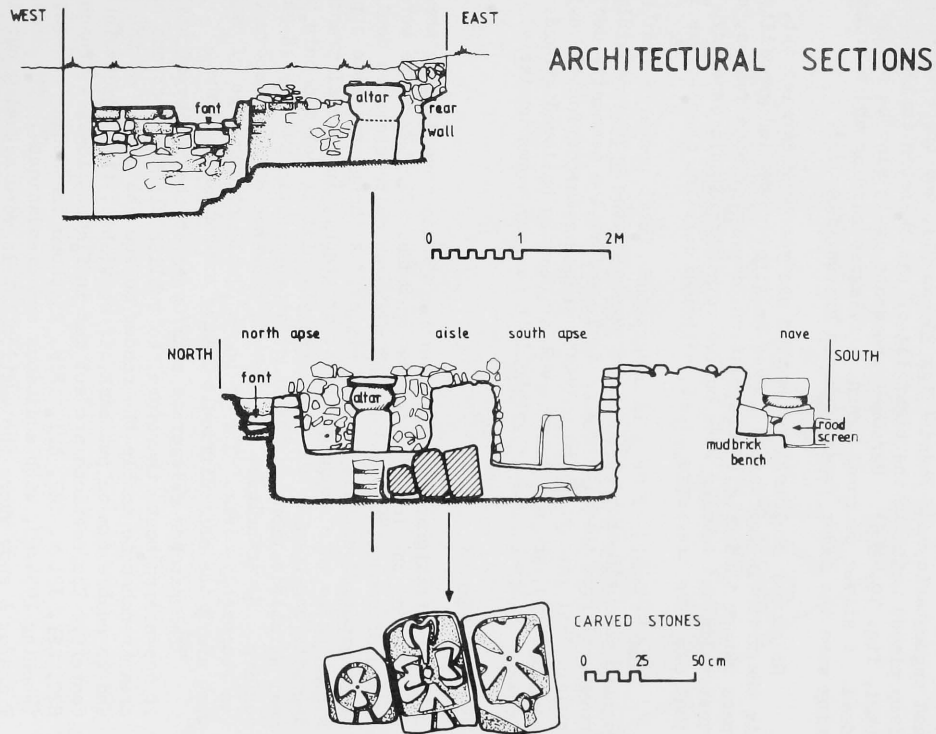


Fig. 15 Architectural cross sections of the chapel

Except for the child burial in the J22 tandir the form on interments which could be discerned (usually that of the deepest graves) was fairly standard. An elongated ovaloid pit oriented E-W was dug to a depth between 0.50 and 1.50 m. and stones placed around the western end as a lining. The corpse was laid in the grave on its back with the head at the western end face up and arms crossed on the chest. It is probable that the corpses were shrouded in a winding sheet; one corpse appeared to have been imperfectly placed in its grave (H21, grave 11, skeleton B), as if the burial party could not see exactly how it lay - possibly the result of cloth obscuring the precise positioning of the body. However, no traces of cloth were observed. Grave goods were not the rule, but they do occur. In J22 small glazed pots and unguentaria were found (figs 39 and 91), and there was a pottery lamp placed next to the right leg of the skeleton inside the church (K21, fig. 79, 265). Personal ornaments could also be buried with the dead. A silver pectoral cross, a filagree earring and a bronze finger ring were the major items found in graves (fig. 89).

No expert skeletal examination has yet been carried out, but it is the writer's impression (based on size, teeth and gracility/robustness rather than precise observation of pelvis, bone fusion, etc.) that males and females were buried together in this cemetery, and that all ages are represented, although only one neonate was found.

The end-date of CP 3 is uncertain. It is probable that CP 3 extended some time beyond the abandonment of the kale. Possibly the move away from the site was gradual, and as the community declined, the church fell into ruin and only the chapel remained for the dwindling congregation, who still buried their dead in hallowed ground. On the ceramic evidence, use after the 14th century seems unlikely.

Stratigraphy

The stratigraphy of the church area was considerably more complex than that of the fortress for two reasons. Firstly there were more phases of occupation, and secondly the ubiquitous graves destroyed the stratigraphic sequence in many places. Although the site supervisors struggled to make sense of the stratigraphy, in several trenches the deposits dug bore in the final analysis little relationship to the real stratification; as a glance at the sections (figs 18-24) will confirm. Nevertheless, the overall sequence outlined above (p. 25 f.) was reasonably clear. The trenches of the church area of Taşkun Kale were among the most difficult I have excavated anywhere.

"The parched eviscerate soil/Gapes at the vanity of toil".

It has seemed best, therefore, to publish all the sections of the church area trenches to enable the reader to see the extent of the problem, and to enable him to put back, if he wishes, the objects into their context. The sections are set out in figures 18-24 - trenches H21, H21 W, H22, J21, J21 W, J22, K21. Fig. 25 shows the coding conventions used (Wheeler 1954:60, with additions and emendations). The crosses with T and/or B show where the section labels were actually put into the side of the trench, and distinguish where the site supervisor thought that one level ended and another began. The extent of the confusion is visible immediately.

The phases discussed above are represented by very few uncontamin-

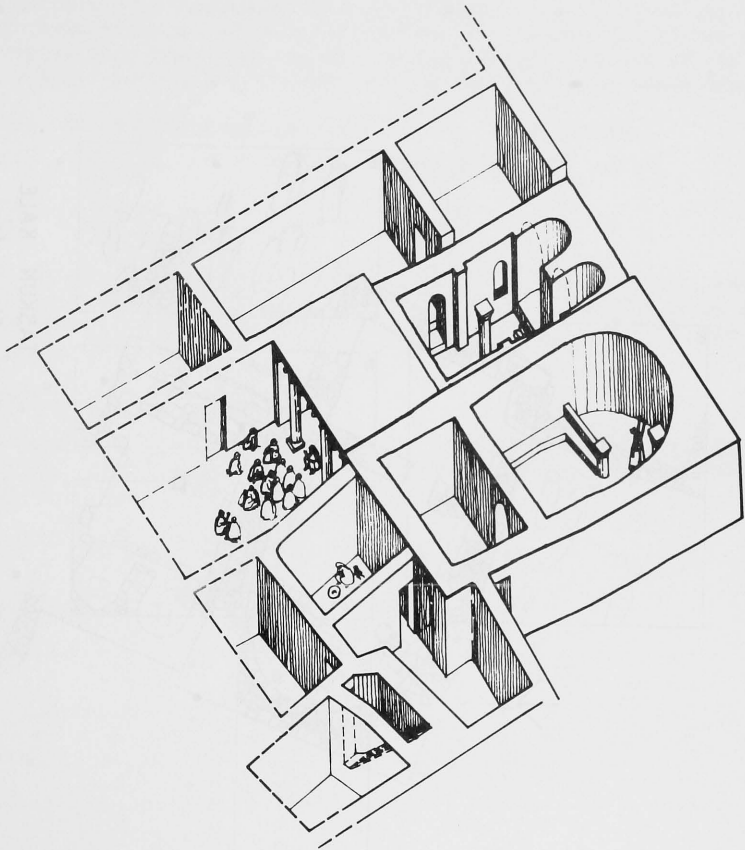


Fig. 16 Reconstruction - birds-eye view of the CP 2 church and chapel from SW

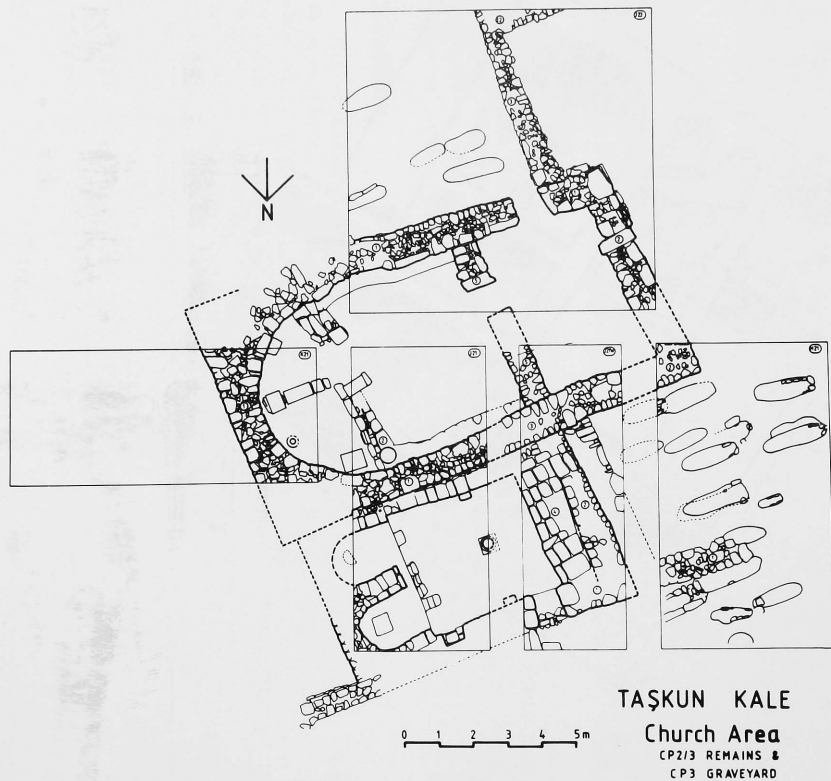


Fig. 17 Plan of CP 2/3 church and chapel, and CP 3 graveyard

ated deposits. These are listed now, with comments.

Late hellenistic phase

The late hellenistic deposits were encountered in extremely limited areas, totalling about 15 m². In H21 and H21 W, these deposits were disturbed by the subsequent CP 1 construction; in K21 there was rather less disturbance of the late hellenistic levels, and much of the pottery recovered came from these layers. A considerable quantity of the late hellenistic pottery is, in fact, rubbish survivals from later deposits.

<i>Trench</i>	<i>Reasonably secure deposits</i>	<i>Less certain</i>
H21	1204.11, .12, .14, .15, .16	1204.9, 1206.2, .3, .4
H21 W	1209.5, .6	1209.9
K21	103.11, .12, .13, .14	103.10

In all three trenches it was evident that fine brown soil about 1 m. thick had been laid down over virgin soil. This fine brown deposit contained few large sherds. For its possible function, see above, p. 26.

Church Phase 1

Whilst CP 1 surfaces were encountered in H21, H21 W, H22, J22 and K21, they were in most cases sporadic and badly damaged by the graves of CP 3 and the robber trenches of CP 2.

H21	1203.5, .14, .15; 1204.2, .7, .8, .9, .13; 1205.2, .3, .4, .5, .6	1201.14; 1204.7; 1206.2
H21 W	1207.6, .7; 1208.1, .2, .3, .4, .5; 1209.2, .3, .4	---

Unfortunately the bulk of the pottery, and in most cases the only pottery, from listed deposits in H21 and H21 W and a number of more obviously contaminated layers was made up of fragments of pan and roll tiles. In consequence there is from these trenches no secure ceramic dating of the basilica. Since diagnostic sherds and other material are also absent from sealed layers in H22, J21, J21 W and K21, the only hints at the basilica's date comes from out-of-context material in this area (i.e. rubbish survivals) and stray finds from other parts of the site.

H22	1603.6	1603.5; 1604.4
J21 W	---	---
J21	---	---

J21 and J21 W were dug only to the CP 2 surfaces. In H22 only the smallest of undisturbed CP 1 floor was found, and all the layers overlying it were mixed except those listed, which produced nothing diagnostic.

K21	103.8	---
-----	-------	-----

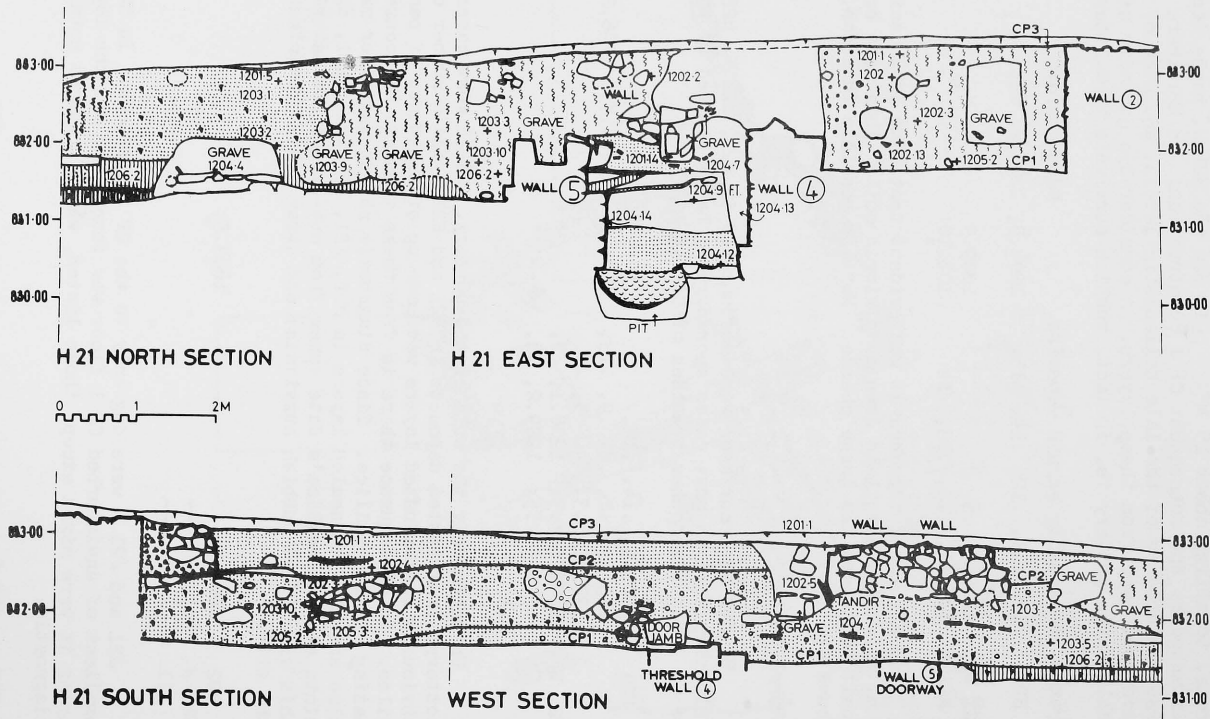


Fig. 18a H 21 N and E sections
 b S and W sections

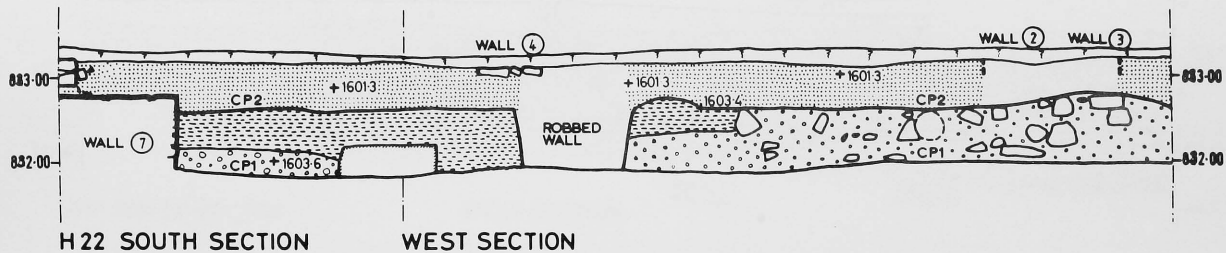
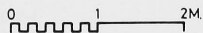
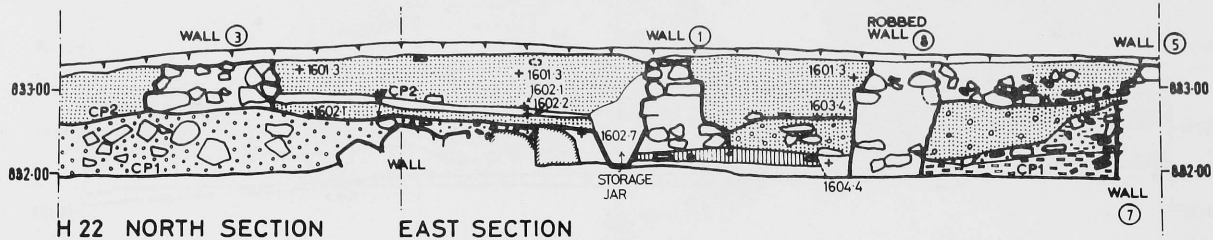
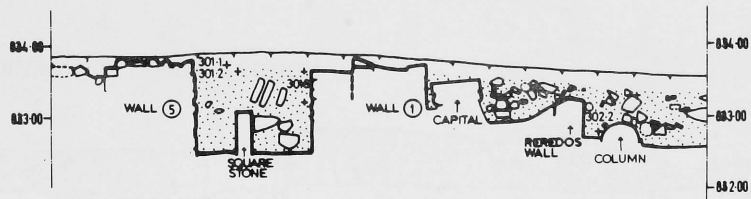


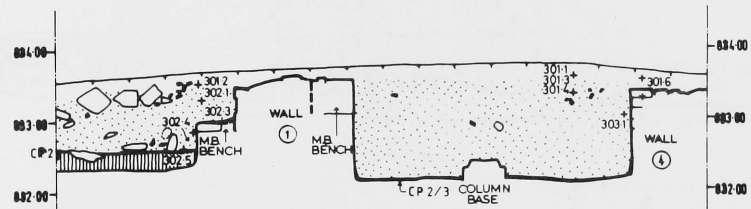
Fig. 20a H22 N and E sections
 b S and W sections



J 21 EAST SECTION



J 21 SOUTH SECTION



J 21 WEST SECTION

Fig. 21a J21 E section
 b S section
 c W section

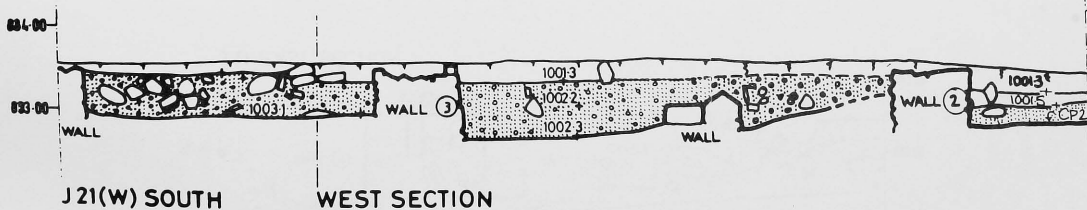
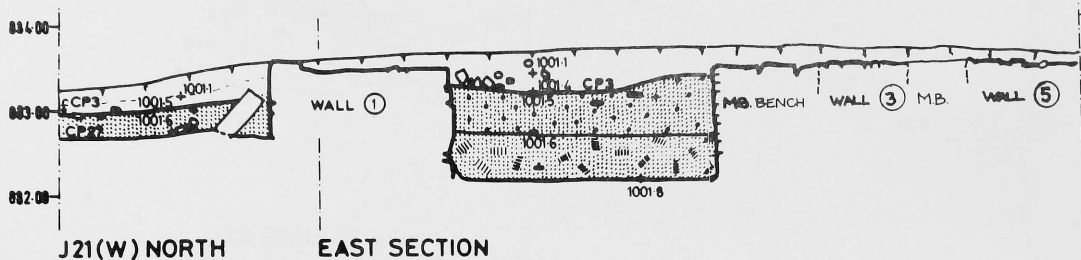


Fig. 22a J21 W N and E sections
 b S and W sections

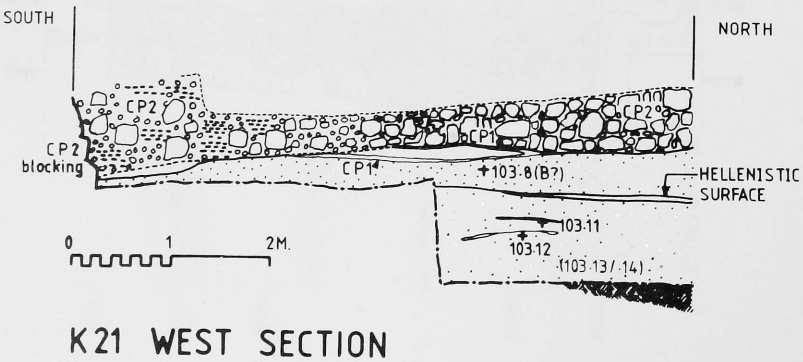
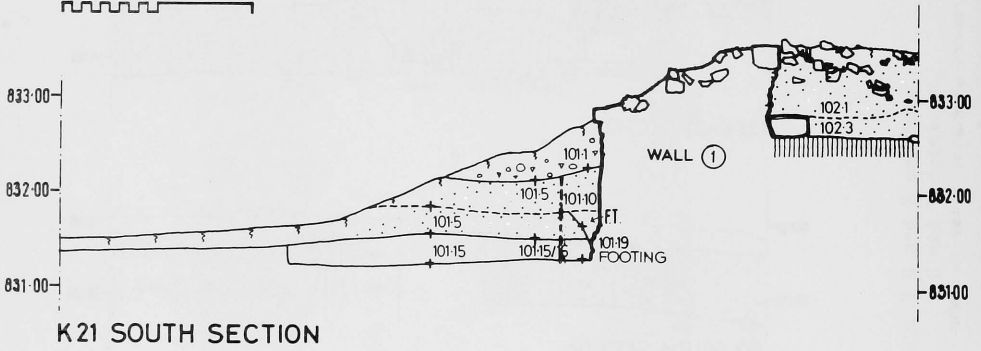
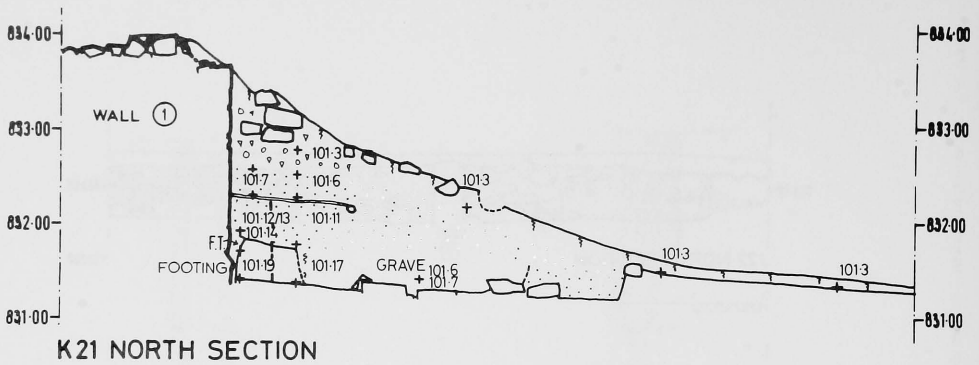


Fig. 42a K21 N section
 b S section
 c W section

Church Phase 2

<i>Trench</i>	<i>Reasonably secure deposits</i>	<i>Less certain</i>
H21	All apparently contaminated by CP 3	
H21 W	1207.3, .4, .5	---
H22	1601.3; 1602.2-.8; 1603.4, .5; 1604.1, .2, .3	1602.1
J21	302.2, .3, .4, .5	---
J21 W	1001.7, .8, .9; 1002.3; 1003.1	1002.2, .3
J22	702.1; 703.11, .14, .15, .16	703.12, .13
K21	103.5, .6	103.2, .3, .4

The bulk of the pottery from the church area is CP 2. However as a result of the graveyard disturbance in J22 and H21 W there are few secure CP 2 deposits. The trenches which might have given interesting CP 2 and CP 3 material in reasonable contexts (J21 and K21) were unfortunately not fully analysed.

Church Phase 3

A large part of H-J-K/21-22 was disturbed by CP 3 burials. Since most of the area was a graveyard it is unlikely that a vast amount of pottery was brought in during the CP 3; few graves contained goods, and there was no evidence of pots being broken at the grave-side by mourners or of any suchlike custom. The bulk of the pottery from the CP 3 deposits is therefore most probably sherds dug up from the previous three architectural phases, plus a few EB sherds. CP 3 layers are therefore not worth listing.

Chronology

As has been made clear in the foregoing sections, the evidence for the chronology of the various phases of occupation in the church area differs in quality.

Late hellenistic (late 2nd century B.C. to early 1st century A.D.)

Although there are neither coins nor inscriptions relating to the earliest architectural remains in the church area it is certain that the first occupation is late hellenistic, dating to the late 2nd or 1st century B.C. and perhaps extending as far as the early 1st century A.D. The late hellenistic material from Taşkun Kale has close affinities with the material found at Aşvan Kale (Mitchell 1980: figs 21-24 and 27-40). The bulk of Mitchell's material dates to his Hellenistic II, ca. 100-66 B.C., and on the basis of his closely dated group one is tempted to suggest a comparable date for the Taşkun hellenistic. However, since the Taşkun sherds do not form a discrete stratigraphical group comparable to the Aşvan ceramics of the first century B.C., and since there are a number of forms at Taşkun not represented at Aşvan, it seems safer to follow the wider dating. The building at Taşkun may have continued sometime after the destruction of the village at Aşvan; it is certain that it was not sacked and burnt in the same way as the village, for neither the walls nor the surfaces showed any sign

of fire damage. If the depredations of the Roman army extended from Aşvan to the site of Taşkun Kale, its activities must have been confined to pillage, rapine and other kinds of mayhem which do not always leave archaeological traces. Assuming then that the late hellenistic building at Taşkun was still standing and in use after the passing of Pompey's legions, there is only very slight and inconclusive evidence involving both Aşvan and Taşkun which may give an indication of when the building was abandoned.

Stephen Mitchell (1980: figs 41-2) presents a small amount of pottery which points to a 1st century A.D. occupation at Aşvan Kale. This centred around a building with a unique trapezoidal layout consisting of a central hall and a peripteral colonnade on a low wall. Around the building was a circumambulatory corridor. Stephen argues that this building was probably cultic (1980: 45); certainly it represents a radical change from the preceding hellenistic period village. It is moreover a structure which seems inappropriate for domestic use. Independently, albeit on rather slender evidence, I reached the conclusion during the 1973 season that the building of the late hellenistic period at Taşkun might also be cultic (above, pp. 26-7; cf. McNicoll 1974: 8), and that its plan might have consisted of a rectangular structure within a second rectangular structure with a circumambulatory passage between them - i.e. a form similar to that found by Mitchell at Aşvan. It seems possible then that the building at Taşkun was superseded by a similar building at Aşvan early in the 1st century A.D.; the similarity of the plan being dictated by the requirements of the cult.

Church Phase 1 (probably between the 4th and 11th centuries A.D.)

The basilica of Church Phase 1 is difficult to date; neither the time of its construction nor the time of its abandonment can be fixed with any certainty. What little evidence there is suggests that this church may have been founded in the 4th or 5th century, and remained in use for several hundred years. The evidence is architectural, artefactual and inscriptional.

1. The tripartite basilica is a very common church form in the Near East from the 4th century on. The influences which governed the layout of the Taşkun basilica could have come from Syria to the south, Armenia to the east, or perhaps even from Cappadocia to the south-west. Given the discovery of the Aramaic and Syriac inscriptions at Taşkun (below, Appendix 2), it is reasonable to expect that the southern architectural influence was paramount. In general terms this seems to have been the case, though there was possibly Armenian input as well. Lassus (1947) presents numerous plans of Syrian tripartite basilicas dating to the 4th, 5th and 6th centuries. Many of these have inscribed apses like Taşkun (e.g. Kseijbe East Church, Qasr al-Banat Monastery Lassus 1947: 174, 274). However in his discussion of the form of the basilica in Syria he emphasises the Syrian preference for internal colonnades, as opposed to the Armenian preference for piers (1947: 54 f.). At Taşkun it is probably that piers were used (above, p. 29). Another feature of Syrian churches which differs from the Taşkun Kale basilica's layout is the width ratio of aisles to nave - usually in the former the aisles are nearly half as wide as the nave; at Taşkun the aisles are extremely narrow; none of the Armenian churches I have looked at have such narrow aisles, but they do appear to favour narrower

aisles than their Syrian counterparts.

Strzygowski (1918: 70 f.) presents a typology of Armenian churches. His second group (II: Langsgerichtete Tonnenbauten) has a subdivision (B: Dreischiffige) which offers the closest parallels in plan to our basilica. The type church of this group, Ereruk, dates to the 4th century; incidentally it is interesting to note that, like our building, it is built on the ruins of a pagan temple. But the basilica at Ereruk (Strzygowski 1918: 153 f.) is somewhat larger than ours. Rather more striking is the similarity of the plan of Aschtarak (Strzygowski 1918: 147) to the Taşkun basilica. Aschtarak is roughly the same size (overall ca. 25 x 13 m.), and is tripartite with an inscribed apse (albeit slightly horseshoe), with aisles 1.92 and 1.73 m. wide internally, and a nave 4.60 m. (Taşkun basilica is at least 20 m. long and 14 m. wide - excluding dependencies - and had aisles 1.50 m., and a nave about 7 m., wide). The church at Aschtarak dates before the middle of the 6th century, as an inscription shows.

Thus in general terms the layout of the church of CP 1 at Taşkun can be compared to 4th to 6th century plans to the south and to the east. But there is one marked peculiarity in the Taşkun basilica, namely the masonry. Both in Syria and in Armenia ashlar masonry was used wherever possible, and where the Armenians built walls with mortar the technique was dissimilar to Taşkun's, for the builders made every effort to conceal the joints between the stones (Khatchatrian 1971: 21). At Taşkun Kale it was quite the contrary: the joints of the walls were made a decorative feature in their own right. The technique of construction at Taşkun sounds more like that of one of the first churches built by St Gregory in Taron (i.e. the present-day Muş area, some 200 km. east of the Aşvan district). The following account is that of Zenob of Glak (quoted in Utudjian 1968: 25).

"When the soldiers had destroyed the idol (of Demetrius), St Gregory laid the foundations of a church. As there were not the necessary materials in the region he took unhewn stones; then having found some lime in the temples of the idols he started the construction of the church in the same place as the temple and with the same proportions".

Although no mention is made of ornamental pointing, the use of unhewn stones is interesting. The impression given by Khatchatrian is that fairly well worked blocks of stone were used in most cases where perfect ashlar could not be cut, and he refers to the occasional use of opus reticulatum in secondary monuments (1971: 22).

2. The excavations at Taşkun Kale produced a Syriac inscription - on a commemorative tablet or brick (fig. 115). It is discussed in Appendix 3 by Sebastian Brock, who dates it between the 10th and 13th centuries. It has a clear religious import, and possibly relates to our church, which was thus in existence at least until the 10th century.

3. As noted earlier, despite the large amount of pottery found in Church Phase I deposits, there was very little that was diagnostic, as most of the ceramic remains consisted of tile fragments. A few of the sherds from Taşkun Kale were probably manufactured between the 3rd and 6th centuries. The most readily identifiable is sherd CN4324 (fig. 86, no. 12), Hayes' Late Roman C ware form 3 (Hayes 1972:

329-338), dating to the second half of the 5th and the first half of the 6th century. (His renaming of the ware 'Phocaeen' Red Slip ware seems premature [Hayes 1980: lix]). This is the only Late Roman form on the site, though sherds were occasionally found. A number of common ware bowls (fig. 86, nos 4-5) may also date to the 3rd or 4th centuries.

4. The glass hanging lamp or wine glass (fig. 91) is a unique piece at Taşkun Kale. The context in which it was found - a blocked doorway - could put it stratigraphically in either CP 1 or CP 2, but its date and probable place of origin - Syria in the 4th or 5th century A.D. (Bauer in Kraeeling 1938: 524-5) point to its being part of the basilica's furnishings.

5. A single Byzantine coin from J21 (McNicoll 1973b: 187) is our only indication of the length of time the basilica might have stood. TK70/6, an Anonymous Bronze, is ascribed by Thompson (1954: 113) to Constantine VIII and Basil II (989-1028 A.D.). While this coin may point to the basilica's still being in use in the 11th century, it may quite possibly belong to a period of abandonment, although its presence in the church area would in that case be a remarkable coincidence.

To conclude this discussion of the date of the basilica, it is worth pointing out that the building must have been kept remarkably clean during the whole period of its use. The tiles of its collapsed roof were the only artefacts found in large quantities within the basilica's ruins.

Church Phase 2 (late 13th and first third of 14th centuries)

The evidence for the date of the second church is ceramic, numismatic and architectural. Under ideal circumstances, and with a large enough sample, numismatic evidence may be conclusive, but the single coin from the church area cannot be considered more than a pointer; the pottery and architecture can best be dated by comparison with the finds on the kale.

1. A single coin of the Ilkhanids, probably of Abū Sa'īd (A.H. 716-736/1316-35 A.D.) was found in J22. It is silver-washed bronze (TK71/52).

2. The technique of construction with unhewn stones and mud-mortar laid in rough courses is closely comparable with that of the fortress. The mudbricks of the two areas are of comparable dimensions.

3. A much larger quantity of pottery was found on the kale than in the church area excavations. Nevertheless there was a large degree of coincidence of forms between the two areas:

- (i) The following unglazed forms first found on the kale were subsequently also found at the church -

13, 15, 17, 19, 26, 40, 48, 67, 70, 71, 74, 79, 84, 94, 114, 120, 121, 123, 149, 150, 159, 167, 192, 203, 206, 210, 219.

This represents more than 10% of all shapes found on the kale, but it should be remembered that about half of these forms were unique.

- (ii) Glazed forms found first on the kale and subsequently at the

church -

19, 26, 34, 37, 42, 65, 77, 92, 93, 96, 115

This represents just under 10% of the total number of kale shapes recorded. Again, quite a large proportion of the glazed forms from the kale are unique.

- (iii) Of the sixty-eight unglazed forms first encountered at the church, twenty-nine were afterwards found on the kale -
4237, 4334, 4249, 4020, 4228, 4230, 4235, 4233, 4174, 4168,
4173, 4167, 4369, 4208, 4033, 4043, 4336, 4269, 4166, 4178,
4240, 4163, 4261, 4260, 4077, 4076, 4321, 4160, 4074
- (iv) Of the eighteen glazed shapes initially encountered at the church, nine had parallels on the kale -
14, 15, 70, 74, 116, 122, 129, 134, 124

In addition to this correlation of forms, the overall impression of wares and body sherds from both areas was one of close similarity. The only difference that I could detect was the lower proportion of glazed ware from the church, which shows up in the shapes recorded: while the church produced 68 against the kale's 241 unglazed forms, i.e. 22% of the total, it provided only 16 glazed forms against the kale's 120, i.e. 13% of the total.

On grounds of pottery, then, the church should date to the same period as the kale.

Church Phase 3 (? mid-14th century)

The only objects which may be ascribed to this period, the graveyard phase, are the grave goods.

The three green pots (fig. 39, nos 131, 134, 136) are unlike any other vessels at Taşkun, although a base like that of fig. 39, 136 was recovered on the kale. The glass unguentaria are also unusual. Perhaps these are later than the bulk of the material of CP 2, but this cannot be proven either by external parallels or on internal, stratigraphical, grounds.

CHAPTER 4

OTHER AREAS

During the second and third season at Taşkun Kale four trenches were dug to answer questions about the nature, date and extent of the occupation of the site - questions which it seemed could not be answered by the 'area excavations' on the kale and at the church. In accordance with the grid these trenches were designated L15, R15, R40 and R80. The position of the R40 and R80 south of the base line zero was approximate, measured by pacing.

L15 was excavated to find out whether there were architectural remains in the area between the church and kale. The trench measured 9 m. N-S x 4 m. E-W, and was sited to include at its north end part of one of the large dry-built rubble stone walls which are a feature of Taşkun Kale. Its south end included part of a fallow field. The clearance of the field wall and excavation of about 10 cm. of topsoil revealed that there were indeed substantial stone footings of walls at the north end of the trench; the south end appeared to have been cleared of all traces of occupation.

The walls, apparently of two phases, were rubble built with a loose mud mortar - the technique of construction was the same as that of the fortress. They were 0.70 m. wide, and the best preserved stood three courses high. It is highly probable that the upper parts of the walls were of mudbrick, as were those of the fortress. Two pits and part of a stamped mud floor constituted the only other architectural finds.

The date of the earlier of the two phases of occupation is uncertain, but probably covered part of the Church Phase I, perhaps around the 10th to 12th centuries. The dating is based on a few bits of pottery similar to fig. 83, 1-7, and a single coin of the Artuqid Nur al-Din Mohammed (1174-85). The later phase is probably contemporary with the late medieval fortress and the church of CP 2. Fig. 40 shows glazed ware from L15.

R15 was a 9 x 4 m. trench sited about 25 m. south of the southernmost tower (room 3). Excavation of the western and southern walls of the fortress had shown that there were no contemporary buildings immediately outside the fortifications, and the aim of R15 was to find out at what point the extramural buildings began, their nature and date. Excavations revealed a domestic area consisting of a tandır (oven) set into a mud floor; its related surface had disappeared. Nearby was a wall of the usual kind - rubble with mud mortar. The plain and glazed pottery is of the same sort as that found in the fortress, and the R15 remains are probably contemporary with those of the kale, i.e. early 14th century.

R40 and R80 were two small trenches dug approximately 300 m. and 700 m. respectively due south of the kale. In the course of the excavations at Taşkun Kale pottery of the medieval period had been noticed in the fields east of the old Elâzığ (Harput) - Aşvan road south of the fortress, and traces of walls had been discerned along

the road itself. The aim of these two trenches was to recover stratified pottery, preferably relating to architecture, to learn something about the southern extent of the site and its date.

R40 measured 4 x 2 m. Within it was found a well-built rubble wall, probably part of a house. From this sondage it is impossible to say whether the area was totally built over or not. R80, similar in size, produced no architecture. The entry in my notebook concerning it (dated 28 August 1973) reads as follows:

"R80 hits a layer of reddish soil, which I believe is sterile. The overlay containing pottery is 30-40 cm. (thick). It seems probable that on this side of the little tributary (of the Kuru Çay), i.e. S of it, there were at best scattered houses and terrace walls for bahçeler (gardens) - note how most of the walls visible in the road follow the contour lines."

The pottery from these two sondages is similar to the late medieval material found in the fortress and church.

Neither of these southern soundings produced evidence for a clearly delimited boundary to the Taşkun Kale settlement. This is not surprising; probably the medieval settlement, like the modern villages of this area of Turkey, consisted of a tightly grouped nucleus of houses, around which spread buildings of a less densely occupied periphery.















	GREY.		TILES
	BROWN		CHARCOAL
	STONEY or RUBBLE		BURNT or BLACK
	CHIPPY		ASH
	CEMENT.		DISTURBANCE
	YELLOW/ GREY		FALLEN M.B.
	VIRGIN SOIL		RED
FT	FOUNDATION TRENCH	CP1	CHURCH PHASE 1
		" 2	" 2
R.T	ROBBER TRENCH	" 3	" 3

Fig. 25 Section coding conventions

THE POTTERY

Recording and presentation

From the first day of excavation in 1970 pottery formed the bulk of the finds at Taşkun Kale. During the first two seasons recording and drawing of the ceramic material was haphazard; only in the final season was a satisfactory system of coping with the mass of pottery adopted. During that season, Margaret Wheeler, our cataloguer, applied to the finds a system which was devised in Italy by Dr Alwyn Cotton during the 1960s. Margaret Wheeler herself had used it at her own site of Santa Rufina in Italy; the same system (with modifications) has been used subsequently at Kandahar in Afghanistan and at Pella in Jordan.

The aim of the system is to have a record of every potentially diagnostic shape recovered from the site and to record what wares and what quantities came from each deposit. After excavation the labelled potsherds are washed and laid out on mats to dry. After drying they are examined, wares and quantities are noted, and the bulk of the sherds are then discarded. (At Taşkun Kale the pottery of two trenches (S12 and R11) was retained in toto, including all sieved fragments). Potentially diagnostic sherds (usually the rims, handles, bases and decorated pieces) are bagged for examination, cataloguing, and if necessary, drawing. Examples of each ware noted are also retained from each deposit.

Into what at Taşkun Kale was called for brevity 'the type series' - actually a collection of all the different shapes which the site produces - goes every piece of pottery which looks different from those already in the 'type series'. Each new shape is recorded in three different places:

1. A control or catalogue book. (At Taşkun Kale separate books were used for the glazed and unglazed pottery). The primary function of this book was to give to each new shape a number ('catalogue number' - henceforward abbreviated as CN) which is inscribed on the sherd. The book also records basic data such as provenance, the sort of vessel, what sheet it is drawn on, its photograph (if any). At Taşkun Kale the glazed ware CNs began at 1, and the unglazed CNs at 4001.
2. A card is filled out. On it the ware and shape of the pot are described, along with its size and any decoration. On to this card a photo of the full scale drawing is stuck. The card may then be filed according to vessel shape or ware.
3. For each deposit dug a layer sheet is kept. On this, in addition to the sherd count and resumé of wares, the number of each new sherd shape is recorded.

For a fragment or vessel with a shape which is already in the 'type series', the recording is simpler.

1. The card of the 'type' with which the new piece is comparable (let

us call the 'type' x) is taken from the file (it is retrieved through the catalogue), and the new piece's provenance (trench, area and level) is noted on x 's card, along with any variation in ware or decoration. The sherd then has marked on it "cf. x ", and it is returned to the bag of sherds of the layer from which it comes.

2. On the layer sheet is recorded "cf. x ". Thus the system permits retrieval of information concerning the totality of occurrences of particular forms of pottery, and provides at the same time a complete record of what was present in any given layer. On a large site the use of a computer will probably be inescapable for the final analysis; on a smaller site like Taşkun Kale retrieval of information from the recording system is possible in the traditional manner.

But even on a small site by the end of the dig the layer sheets were numbered in hundreds. Since it has turned out that the majority of the material from Taşkun Kale belongs to one period, and as there appears to be discontinuity between all the periods represented on the site, there seems no purpose in publishing all the layer sheets. They have, however, been used by Jon Hosking in his examination of the occurrences of the various sorts of vessels in some of the kale rooms (Appendix 4). Layer sheets will have value, it seems to me, on those sites where occupation lasts a century or more.

In the catalogue of this publication each shape depicted has the following information:

1. Publication number.
2. Catalogue number, prefixed CN (this is the number on the sherd or vessel at Elâzığ).
3. Phase. (CP = Church Phase; KP = Kale Phase).
4. Its provenance (trench, area within trench, deposit).
5. Its description (shape, ware and decoration).
6. Parallels from Taşkun Kale (the "cf. sherds").
7. Previous publication, if any.

The emphasis then is on the shape of the vessel. While the wares of all sherds were recorded, they were defined simply by visual inspection. No chemical or microscopic analyses were carried out. Under these circumstances classification by ware seems inappropriate. Again, the material has not been examined by a ceramic technologist, so that finer points of potting may well have escaped us; the vast majority of vessels was wheel-made, but we could say little more than that.

An advantage of presentation by shape is that it enables one to organize the pottery in two major and interwoven categories - an objective one - i.e. simply according to shape and size, and a subjective one - i.e. according to what one believes the vessel was used for. The objective categorization takes precedence; its two major categories are O(pen) and C(losed).

The O category is subdivided as follows:

- 01 - small to medium, open, shallow vessels.
- 02 - small to medium, open, deep vessels.
- 03 - large, open, deep vessels.

- 04 - vessels with large, flat bases and low, usually vertical, sides.
- 05 - miscellaneous.

The C category is divided as follows:

- C1 - large, tall, usually necked vessels.
- C2 - small to medium, tall, usually necked vessels.
- C3 - small to medium, squat, necked or hole-mouthed vessels.
- C4 - tandirs (cooking ovens).
- C5 - miscellaneous.

Both categories are subdivided according to shape and size variations.

- X1 - lids,
- X2 - bread cookers,
- X3 - tiles,
- X4 - water pipes,
- X5 - smoking pipes,
- X6 - pot stands,
- X7 - strainers.

form a category of their own.

The functions of the T.K. pottery may be classified as follows:

- | | | |
|--------------------------------------|---|-----------------|
| 1. Storage |) | |
| 2. Preparation |) | |
| 3. Portage |) | Overlapping use |
| 4. Cooking |) | |
| 5. Eating and drinking |) | |
| 6. Ablution |) | |
| 7. Miscellaneous, including funerary |) | |

1. Storage

(a) Storage jars/"pithoi" (=C1)

Function : To contain water, grain, flour, chaff etc. Short- or long-term storage.

Description : Usually a necked vessel, generally too large to be carried with ease, having an empty weight of 15 kg. or more. Storage jars are usually dug into the ground for stability and (in the case of water storage) coolness.

(b) Storage bowls (=03)

Function : To contain milk, yoghurt, curds, whey, cheese in brine. Short-term storage.

Description : Storage bowls are generally lighter than storage jars, and can be moved empty or full. However, because of their rim:base proportion ($\approx 3:1$), moving them when full is a hazardous operation.

2. Preparation of food

(a) Bowls (=01-03), and cooking vessels (=03)

Function : To hold ingredients being prepared for cooking or for the table, and to serve as mixing bowls.

Description : Both open and closed vessels. Probably the limiting factor is the length of the stirring spoon!

(b) Jugs and Juglets (=C2)

Function : To hold small quantities of oil or water to mix into dishes being prepared.

Description : Small to medium necked vessels, suitable for pouring. Sometimes with handle and spout.

3. Portage

(a) Water jars/jugs/"flagons" (=C2)

Function : For carrying water from stream or spring.

Description : Usually a tall, necked vessel, similar in shape to a storage jar, but small enough to be carried easily by one person when full. Sometimes handles facilitate carriage.

(b) Cooking/serving trays (=O4)

Function : Primarily for cooking certain dishes which require a large surface area. Also used as serving dishes. The modern aluminium equivalent is a universal feature of the Turkish lokanta, and is also seen being carried to and fro in present-day villages.

4. Cooking

(a) Tandirs/ovens (=C4)

Function : Fixed position ovens, usually coil-built, smoothed inside and out and fired in a hole in the ground.

(b) Cooking vessels (=C3)

Function : Cooking food, parching grain.

Description : Generally globular body with a fairly wide neck.

(c) Bowls/güvec (stew) pots (=O2)

Function : Most commonly simply for eating food; a bowl may also be used for cooking. Today individual portions of stew (meat and vegetables, mixed vegetables) are often cooked in bowls.

Description : Small to medium open vessel, customarily with a greater width than depth.

(d) Bread Cookers (=X2)

Function : For cooking flat, round bread.

Description : Flat, round platters with slightly upturned edges like a tray. The modern equivalent, made of sheet iron, is usually set on a three- or four-legged iron stand directly over the fire. No stands were found at Taşkun Kale.

5. Eating and drinking

(a) Bowls (=O2)

Function : For eating from. Often involves liquids - meat

juices, gravy, soup.

Description : See 2(c) above.

(b) Plates (=01)

Function : For eating from. Frequently used for fruit.

Description : Small to medium open shallow vessel.

(c) Jugs and juglets (=C2)

Function : To contain drinking water, wine or ayran (a mixture of yoghurt and water) for immediate consumption.

Description : Small to medium sized necked vessels, suitable for pouring. Sometimes with handle and spout.

6. Ablution

Jugs and juglets (=C2)

Function : To contain water for washing.

Description : As 5(c) above.

7. Miscellaneous, including Funerary

(a) Lids (=X1)

Function : To cover vessels of different kinds, most commonly cooking pots.

Description : Flat, circular utensil with central knob or one or two handles on top.

(b) Pipes (=X4)

Function : Drainage.

Description : Cylindrical object, open at both ends.

(c) Tiles (=X3)

Function : Roofing and flooring.

Description : 1. Roofing.

- (i) Pantile (Laconian tile): curved imbrex.
- (ii) Flat tile: rectangular tegulus.

(d) Lamps (=C5, O5)

Function : Lighting.

Description : (i) Open shape like a small bowl with pinched rim to form nozzle.

(ii) Closed shape with small holes for oil and nozzle.

(e) Smoking pipes (=X5)

Function : To hold burning tobacco.

Description : Hubble-bubble bowl.

(f) Pot stands (=X6)

Function : To stand cooking pots and vessels with unstable bases on.

Description : Medium to large sized ring of fired pottery.

(g) Strainers (=X7)

Function : To enable easy separation of liquids and solids.

Description : Flattish or bowl shaped perforated vessel.

(h) Funerary vessels: Juglets (=C2) and lamps (=O5)

Function : Unknown. Presumably believed to be useful and/or pleasing to the dead in an after-life.

Description : Small juglets, presumably to contain liquid, and a pinched spout lamp.

Medieval glazed pottery: manufacture and ware

The bulk of the late medieval pottery found at Taşkun Kale was locally made. At nearby Aşvan the remains of three pottery kilns were found in the Medieval II horizon of the 12th and 13th centuries (Mitchell 1980: 49-55); they were evidently used to fire only glazed vessels, and although they were no longer in use at the time of Taşkun's occupation in the late 13th and early 14th centuries, they are striking evidence that sufficient expertise was available locally to produce the technologically sophisticated fine glazed pottery. This being so, there seems little room to doubt that the simpler plain and painted pottery was also manufactured in the neighbourhood. At Aşvan the construction of the 'medrese' of Medieval III, contemporary with the fortress and CP 2 church at Taşkun, put a halt to the potters' activities on the hüyük; although the succeeding potteries were not located, one glance at the glazed wares of Aşvan and Taşkun suffices to show that the same 'school' of potters continued their production from the 12th through into the 14th centuries. (Compare for example the leaf and spiral motifs of fig. 32, 53 with Aşv. 1016 and 813, the arcade motifs of fig. 29, 15 and 17 with Aşv. 786, 941 and 975, the woven basketry motif of fig. 37, 104 with Aşv. 924, etc.). At the same time it must be acknowledged that the Aşvan district was part of the ceramic *koine* of the Levant during the 12th, 13th and 14th centuries, receiving technical information and fashions from the surrounding areas, whose influences affected shape and decoration of the glazed pottery.

The glazed ware of Taşkun is extremely consistent in fabric and colour. It is well levigated with a very fine grit temper, and it is consistently fired between 5YR 6/4 and 5YR 7/6 in the Munsell range ('light reddish brown', 'pink', and 'reddish yellow'). Pottery with a brown glaze tends to be fired to a redder colour - about 7YR 6/4. Other variants include the lamp CN112 (fig. 38, 117) 2.5YR 6/6; the mystery object CN109 (fig. 39, 133) 10YR 8/3; the blue glazed base CN 100 (fig. 37, 108) 7.5YR 8/4. But such variants are few and it is my view that the bulk of the glazed pottery was fabricated from the one source of clay. Contrast the Korucutepe material analysed by Bakirer (1974:100).

As far as could be seen, before being glazed the vessels were slipped on the inside and over the exterior with a thin white paint; only the lower part of the exterior surface and the base were unslipped. Through the slip the pattern, if any, was incised with a pointed implement. The resultant lines show up dark through the subsequent glazing - khakhi or black with a green glaze, dark brown or black with a yellow glaze, dark brown or black with a brown glaze. A problem is posed by an unglazed fragment (fig. 77, 240), a grey ware sherd with

an incised pattern, which was presumably intended to be glazed, for a decoration of this sort without a glaze would be very unhygienic. It appears then, that occasionally incision occurred before the application of the slip, or that glazing sometimes occurred directly onto the surface of the vessel. In her examination of the glazed pottery at Korucutepe Bakirer (1974: 102) observed that many of the incised lines had been painted with moss green or black paint before glazing, in order to make the design stand out. This technique was not observed at Taşkun, but Mitchell reports it in his description of the Aşvan glazed wares (1980: 75).

Mitchell (1980: 73-75) divides the locally manufactured glazed pottery of Aşvan into five categories:

1. Finely bodied polychrome sgraffito ware
2. Robust bodied polychrome sgraffito ware
3. Robust bodied polychrome sgraffito ware, usually green glazed, some brown
4. Robust bodied monochrome ware, mostly green, some yellow and brown glaze
5. Polychrome 'splashed' ware.

The Taşkun glazed pottery fits well into these categories, excepting the probable imports discussed below (pls 33-38).

By far the most common colour of glaze is green, which varies from a pale, almost white, shade to a dark, jungle green or khakhi - sometimes on one and the same pot (pl. 35). Other colours, brown (pl. 36) and yellow, are much less frequent, and the number of blue glazed fragments recovered from the site can be counted on the fingers of both hands. Polychrome is also comparatively unusual (pls 33-4). The following table shows the proportion of colours on all the rim sherds of open shapes recorded.

<i>No. of rimsherds</i>	<i>Green</i>	<i>Yellow</i>	<i>Brown</i>	<i>Polychrome</i>	<i>Total</i>
	293	10	18	13	334
<i>%</i>	87.73	2.99	5.39	3.89	100

Fig. 26 Colours of glazes on 01 and 02 rimsherds

The coat of glaze was usually applied by holding the vessel by its foot and dipping it into the glaze; presumably it was then turned upright and the glaze swilled around the interior to get an even coating before the residue was tipped out. Evidently many vessels were then left to dry mouth down, as a result of which drips of glaze are sometimes seen around the rim (e.g. CN77 (fig. 28, 5), CN127 (fig. 29, 18) CN121 [fig. 31, 48]). On the polychrome pots a second coat of glaze was applied selectively, and if need be, a third. To dry, some at least of the polychrome pots were kept upright, as is clear in the case of CN8 (fig. 28, 9), where the trickles of glaze down the outer surface appear to have been broadened by the glazer to form a pattern, but in one place on this bowl a black dribble remains. On CN59 (fig. 29, 17) the glazer appears to have brushed the residue of the second glaze around the body in two horizontal lines to spread the drops and to hasten the drying of the glaze.

The majority of the Taşkun Kale glazed vessels were incised. Bakirer gives the figure of 60% incised at Korucutepe; Taşkun was roughly the same (58% of a random count of 120 pieces). Excision (i.e. *champlevé*) was rare; probably less than 2% of the total of glazed sherds, though Stephen Mitchell tells me that it is his impression that there was more of this style at Taşkun than there was at Agvan. The incised motifs were probably rapidly, and certainly in many instances, carelessly executed. Geometric and semi-abstract motifs predominate - criss-cross patterns, whorls, scale patterns, basketry motifs and hatched squares are found. Stylized leaves, leaf scrolls, ogival arch patterns and pseudo-arabic script are among the more representational designs.

Inexplicably, all six intact glazed vessels found at Taşkun are not incised. Simple glazing without other decoration seems to have been used on closed shapes (C2), and also on open lamps (O5), but since the bowl CN96 (fig. 32, 61) and other open shapes are also unincised it seems impossible to draw any conclusions about the relationship of shape and decoration.

Deep bowls and shallow bowls or plates (O1 and O2) are the predominant glazed shapes at Taşkun Kale. Only seventeen of the one hundred and forty-one shapes in this catalogue are not O1 or O2, and of these, eight are jugs or juglets (C2) and five are lamps (O5). Among the open shapes by far the most numerous is the bowl CN12 (fig. 29, 19) with forty-five examples. Next are CN28 (fig. 34, 77) with twenty-three examples, CN45 (fig. 30, 34) with twenty examples, CN 28 (fig. 34, 77) with nineteen examples (though with small fragments such as these there is less certainty about overall similarity of shape) and CN2 (fig. 33, 65) with fourteen examples. Almost 70% of the shapes are unique at Taşkun. All the deep and shallow bowls had ring feet, which were presumably made in the usual fashion. They are frequently very high. The jugs, juglets and lamps have flat bases.

As with the evident consistency of the glazed ware, so with the shapes. Compared with the unglazed shapes there is a precision in the manufacture of the glazed vessels' shapes, which is indicated by the comparatively high occurrences of parallels of popular shapes.

Glazed ware was a luxury ware. It is doubtful whether it formed more than 10% by number (rather than by weight) of the sherds at Taşkun.

The following figure gives the numbers of sherds in each layer of a kale trench, and the proportions of the totals of glazed and plain medieval sherds and EB sherds.

<i>Deposit</i>	<i>Nature of Deposit</i>	<i>Glazed</i>	<i>Plain</i>	<i>EB</i>	<i>Total</i>
1301.1)					
.2)	Topsoil	31	282	17	330
.3)					
.4)	Floor overlay	--	24	1	25
.5)					
.6)	Fallen mb	25	201	31	257
.7)	from walls				
.8)					
.9)	Pit	1	33	3	37
.10	Fallen mb (?)	46	406	27	469
.11	Ashy	--	--	--	--
.12)					
.13)	Burnt mb	6	13	6	25
.14	Ashy	8	35	6	49
1302.1)					
.2)	Topsoil	21	213	18	252
.3)					
.4)					
.5)	Fallen decayed	35	171	65	271
.6)	mb				
.7)					
.8	Pit	1	--	--	1
.9	Storage jar	--	1	--	1
.10	Area around storage jar	5	204	5	214
.11	Fallen mb	--	14	--	14
.12)					
.13)	Pit	2	12	7	21
.14	Fallen mb	--	56	27	83
.15	Pit	1	4	2	7
1303.1	Topsoil	2	46	7	55
.2)					
.3)	Fallen mb	7	202	15	224
.4)					
.5	Pit	2	42	1	45
TOTAL		183	1960	237	2380
%		7.69	82.35	9.96	100

Fig. 27 *Numbers and proportions of medieval glazed and plain and Early Bronze Age sherds in Trench R10 (trench recovery only)*

"It has recently become clear that glazed sgraffito pottery, identical with or akin to the types found at Aşvan, was the commonest form of decorated pottery in much of Anatolia, N. Syria, Cyprus and NW Iran in the 12th and 13th centuries A.D." (Mitchell 1980: 75). It seems to me that to the close of this statement we could add "and indeed it remained popular in Eastern Anatolia through the 14th century", as there is evidence that glazed sgraffito pottery continued to be dominant well into the 1300s at sites such as Taşkun Kale, Korucutepe (where Bakirer 1974: 98 f. dates the glazed ware 'ca. 1200-1400 A.D.'), and also at Aşvan itself (Mitchell 1980: 77). Stephen Mitchell has cited the relevant publications concerning sites which have produced glazed sgraffito ware similar to the Aşvan district material (1980: 75); the material from these sites is generally less well dated, so there seems no need to repeat them here. An interesting group of complete vessels at Dumbarton Oaks (Rice 1966: 209-219) belonging to the same broad ceramic tradition does deserve mention. It lacks definite provenance, but Rice observes that -

"In view of the orientalizing nature of the designs of some of these vessels....as well as on the basis of their shapes, a location in the East Mediterranean, perhaps as far south as Syria, seems likely. A date as early as the thirteenth century is possible, though one in the early fourteenth is more likely."

With this view accord Morgan's earlier conclusions on the glazed sgraffito ware at Corinth (1942: 159).

What distinctions, if any, can one see between the Medieval II glazed pottery of Aşvan (12th-13th centuries) and the KP I-II pottery of Taşkun (late 13th-early 14th centuries)? In motifs there is very little to distinguish the two groups. In shapes, however, we may discern a few differences.

1. The upturned lip with a marked angle of Aşv. 597 and 643-7 is uncommon at Taşkun (our fig. 31, 45 and 47 are gentler).
2. Only one example of a deep bowl with a thickened everted rim was found at Taşkun (fig. 35, 91); they are more common in the Aşvan corpus (e.g. Aşv. 596, 604, 624, 629, 630, 634, 637, 677).
3. On the other hand, shallow bowls with flattish or flat flaring rims are infrequent at Aşvan (only Aşv. 1013), whereas at Taşkun they were common (fig. 32, 52-61).

Many other variations can be seen, but most of them may be simply oddities rather than different classes.

Imported glazed pottery was extremely uncommon at Taşkun Kale.

1. A few fragments of champlévé were found; conventionally these are dated to the 12th or 13th centuries (fig. 38, 119, 120, and pl. 34b; Schnyder 1975: 192 ('Gerruskeramik'), Fehérvári 1973: 65-6 ('Garrus ware'), possibly also Jakobson 1959: 228-300, although his group 7A is not stated to be champlévé).
2. A few fragments of black underpainted blue glazed ware may possibly be 14th century Mamluke (pl. 33 - cf. Atil 1981: 159).
3. Fragments of clear glazed sgraffito vessels with pale green and light brown decoration more precisely painted than most of this class (pl. 34a) may originate outside the Aşvan district, perhaps

in Syria (cf. Rice 1966: 216).

4. A single fragment of gold lustre painted ware with white ground was found in 1971 (not illustrated). This may in fact be from Samarra and therefore early (10th or 11th century). If so, it probably reached the site at the end of CP 1.

All glazed ceramic vessels of KP I, KP II, CP 2 and CP 2/3 are wheelmade unless otherwise stated.

All figs scale 1:3, unless otherwise stated.

Fig. 28 *Glazed wares (kilo)*

- 02
- 1 cf CN118 KP I S11 207.4
 RD 9 cm.
 Medium fine orange ware (5YR 6/6). White underpaint. Yellow glaze sgraffito i., yellow glaze to shoulder o., white paint below. Simple curving wall, rounded rim.
- 2 CN133 KP I/II T9-11 2101.7
 RD 20 cm.
 Buff ware (7.5YR 6/4). Yellow glaze, brown sgraffito i. Yellow glaze with brown patch o., brown around rim. Lower wall o. unglazed.
 Parallels: S11 200.5 brown glaze i. and o. - thinner body C
 207.2 2 frags brown glaze i. and o. KP I
3. CN1 KP II (topsoil) S10 501.1
 RD 14 cm.
 Fine light pink ware. Light green above dark green glaze o., lower wall o. unglazed. Light green glaze with khakhi sgraffito around lip i. Curved wall, rounded rim.
 Parallels: J22 701.26 green glaze CP 2/3
 L16 802.2 green glaze, black sgraffito
 S10 501.4 green and brown glaze KP II
 501.5 dark and light green glaze KP I
 502.9 green glaze very shallow KP I?
 Previously published: McNicoll 1973a: 174, fig. 12, no. 13
- 4 CN13 KP I R11 604.1
 RD 24 cm.
 Fine pink ware. Green glaze upper wall o. unglazed below, green glaze i. Incurving wall, rounded rim.
- 5 CNT7 KP I/II R9 1403.1
 RD 15 cm.
 Red-brownish ware. Green glaze i. and o. Black sgraffito i. Curving wall, rounded rim, Black glaze drip on rim.
- 6 CN16 KP I S10 501.5
 RD 21.5 cm.
 Fine pink ware. Interior: khakhi glaze with apple green band demarcated by sgraffito lines. Exterior: light green glaze with sgraffito on upper wall, white underpaint visible below. Simple curving wall, rounded rim.
 Parallels: S11 204.6 green glaze KP I
- 7 CNT KP I S11 201.13
 RD 16 cm.
 Fine light pink ware. Black and khakhi sgraffito, dark to light green glaze i., green glaze o. Curving wall, simpler rim.
 Previously published: McNicoll 1972: 60, pl. 37, no. 7
- 8 CN118 KP I R10 1301.7
 RD 16 cm.
 Medium fine orange ware. Pale green glaze with khakhi sgraffito i., darker green glazed upper wall o., unglazed below. Simple curving wall, rounded rim.
 Parallels: S11 207.4 yellow glazed, sgraffito KP I
- 9 CN8 KP I/II S10 501.8
 KP II (topsoil) S11 201.2
 RD 20 cm.
 Fine buff ware o. (bottom to top): zones of dark brown, yellow-brown and whitish glaze, lower wall o. unglazed. Intentional (?) glaze dribbles in different shades of green and an accidental black one rim downward. Interior yellow-brown with sgraffito lines. Curving wall, slightly bevelled rim i.
 Parallels: R10 1301.2 green glaze KP II (topsoil)
 S10 501.5 green glaze KP I
- 10 CN3 KP II (topsoil) S10 501.2
 RD 22 cm.
 Fine pink ware. Light green glaze with thick lines of khakhi and thin ones of dark brown o., green to whitish glaze with brown sgraffito i. Curving wall, simple rim.
 Parallels: R15 2001.1 green glaze
 S8 1502.1 green glaze KP I/II
 S11 205.3 green glaze KP II
 Previously published: McNicoll 1973a: 172, fig. 12, no. 3
- 11 CN99 KP I/II S8 1502.1
 RD 20.5
 Medium coarse pink ware (5YR 7/4). Dark green glaze o., lower wall unglazed. Interior: pale green glaze with dark green lip. Band of sgraffito design with green dark green and yellow brown glaze. Curving wall, simple rim with slight concavities i. and o.
 Parallels: S11 201.4 green and speckled light brown glaze KP II
- 12 CN126 KP I/II (topsoil) T9-11 2101.2
 RD 20 cm.

Medium buff-orange (5YR 6/4). Exterior: green glazed upper wall, unglazed below. Interior: green and whitish glaze, sgraffito. Curving wall, rounded rim.
 Parallels: S11 201.5 buff ware, green and speckled brown glaze KP II
 205.6 brown glaze KP II

- 13 CN80 and 64 KP II (topsoil) R10 1302.2
 KP II (topsoil) S10 501.2
 RD 29 cm.
 Orange ware, green glaze o., green glaze with black sgraffito i.

Fig. 29 Glazed wares (kale)

02

- 14 CN147 KP I/II (topsoil) S11 203.7/201.2
 RD
 Fine orange ware. Green glaze i. and o., two lines of sgraffito i. Curving wall to upright rounded rim. Pinchmarks in wall o.
 Parallels: L16 801.2 green glaze - slightly more incruvating
 S10 502.9 green glaze KP I-II and KP I
 and 503.1)
 Previously published: McNicoll 1972: 60, pl. 37, no. 2

- 15 cf CN5 Provenance unknown
 RD 21 cm.
 Close pink ware (5YR 6/4). Pale light green glaze o. with alternating brown and dark green glazed columns or ogival arches. Black sgraffito. Light green scale pattern i. with brown and dark green centres with sgraffito.

- 16 CN5 KP II S10 501.4
 RD 18 cm.
 Fine pink ware. Exterior: light green glaze above reserved area. Interior: olive green sgraffito design, basic light green glaze with one area of yellow-brown glaze. Curving wall, rounded rim.
 Parallels: Q10 E 1801.12 green glaze i. and o. KP I
 R11 604.1 green glaze i. and o. KP I
 S10 500.2 green glaze i. and o. Cleaning
 502.2 green glaze i. and o. KP I
 Previously published: McNicoll 1973a: fig. 12, no. 5

- 17 CN59 KP I S10 501.5
 RD 33 cm.
 Fine buff ware. Exterior: green glaze with dark green dribble marks from rim and roughly horizontal lines in dark green. Interior: dark green/khaki sgraffito design (arches with ogives), basically pale green design, dark green around rim, brown with one arch.
 Parallels: L16 802.2 green glaze i. and o., trickle of brown i.
 S11 201.14 brown glaze i. and o. KP I
 203.3 green glaze, black sgraffito lines i. KP II
 203.4 decayed green glaze KP II
 205.2 green glaze slightly more curved body KP II
 207.1 green glaze KP II

- 18 CN127 KP II (topsoil) S11 201.2
 T9-11 2101.2
 RD 16 cm.
 Fairly fine biscuit coloured ware. Dark green above unglazed area o. Light green glaze i. with olive bands dripping down into the bowl. Droplets of glaze on rim. Curved wall, rounded rim.
 Parallels: H22 1601.6 CP 2
 S11 205.9 green glaze, dark i. with light spots KP I

- 19 CN12 KP I R11 604.1
 RD 20 cm.
 Fine pink ware. Green glaze i. and o., lower wall o. unglazed. Curving wall, upright rounded rim.
 Parallels: H21 1203.1 green glaze CP 2/3
 H22 1601.4 green glaze CP 2
 1603.4 green glaze CP 2
 Q9 E 1700.1 green glaze cleaning
 1700.2 green glaze cleaning
 R9 1400.1 green glaze cleaning
 1401.1 3 ex. green glaze KP I/II (topsoil)
 1401.1 green glaze KP I/II ?
 R10 1301.3 green glaze KP II (topsoil)
 1301.5 green glaze KP I ?
 1301.7 4 ex. green glaze KP I
 1301.10 multicolour glaze KP I
 1302.1 2 ex. green glaze KP II (topsoil)
 1302.5 green glaze KP I
 1302.6 green glaze KP I
 1302.10 green glaze KP I
 R11 602.2 green glaze KP I
 603.2 green glaze KP I
 604.1 green glaze KP I
 CB 1502.1 green glaze KP I?

- S9 1103.1 2 ex. green glaze KP I/II
 S10 500.1 green glaze cleaning
 500.2 green glaze cleaning
 501.1 green glaze KP II (topsoil)
 501.3 4 ex. green glaze KP II
 501.8 green glaze KP I/II?
 501.15 green glaze KP II
 502.9 green glaze KP I?
 503.1 green glaze KP I
 504.1 green glaze KP I/II?
 R15 2001.1 green glaze
 2001.1 yellow glaze with sgraffito
 Previously published: McNicoll 1973a: fig. 12, no. 12
- 20 CN4 KP II S10 501.3
 RD 12 cm.
 Fine pink ware. Exterior green glaze above reserved area, interior green glaze with brown blobs.
 Previously published: McNicoll 1973a: fig. 12, no. 4
- 21 CN97 KP I Q10 E 1f01.11
 RD 13 cm.
 Fairly fine pink ware. Green glaze i. and o. Slightly curving wall, upright rounded rim.
- 22 cf CN124 KP II S11 201.4
 RD 10.5 cm.
 Harsh gritty pink ware (5YR 7/4). Green glaze with black sgraffito i., green glaze o. above unglazed area.
- 23 CN108 KP I R10 1301.10
 KP II S11 207.1
 RD 11 cm.
 Fine pink paste. Walls of this and CN122 (H22 1602.2) are thinner than all others at TK. Light green glaze i. and o., with dark sgraffito designs somewhat similar to fig. 29,15. Purple, brown and dark green blobs of glaze applied with only the vaguest regard for the designs.
- Fig. 30 Glazed wares (Kaia)*
- 02
- 24 cf CN10 KP I S11 202.8
 RD 30 cm.
 Fine pink ware. Brown glaze i. and o., dark on rim i. Black sgraffito i. Curving wall, almost carinated, outturned rim with rounded lip, bevelled i.
- 25 cf CN10 KP I R11 602.2
 Fine pink ware. Green glaze i. and o. Carinated body, inward curving upper wall. Outward rounded rim with bevel i.
 Previously published: McNicoll 1973a: fig. 12, no. 10
- 26 CN10 KP I R11 604.1
 RD 20 cm.
 Fine brown ware (originally pink?). Exterior medium green glazed upper zone, lower zone reserved. Interior green bubbled glaze, burnt black. Curving wall, almost carinated. Slightly outturned rounded rim, bevelled i.
 Parallels:
 H21 1201.1 green glaze CP 3 (topsoil)
 H22 1601.2 yellow glaze CP 3 (topsoil)
 J22 703.9 brown glaze CP 2/3
 Q9 E 1701.1 green glaze KP I/II?
 R9 1702.1 2 ex. green glaze KP I/II
 1404.1 green glaze KP I/II?
 1400.1 green glaze cleaning
 1402.2 green glaze KP I/II?
 1403.1 brown glaze KP I/II?
 R10 1300.1 2 ex. brown glaze and green glaze with sgraffito cleaning
 1300.3 2 ex. green glaze cleaning
 1301.3 green glaze KP II (topsoil)
 1301.13 2 ex. green glaze KP I
 1302.2 green glaze KP II (topsoil)
 1302.6 green glaze KP I
 1303.1 green glaze KP II (topsoil)
 R11 604.1 green glaze KP I
 S8 1501.1 green glaze KP II (topsoil)
 S9 1101.1 2 ex. green glaze KP I/II? (topsoil)
 S10 500.6 green glaze cleaning
 501.3 green glaze KP II
 501.4 2 ex. green glaze KP II
 501.8 green glaze KP I/II?
 501.12 green glaze KP I?
 501.18 2 ex. green glaze KP I
 502.3 smaller ex. green glaze KP I
 502.6 smaller ex. green glaze KP I
- 27 CN115 KP I R10 1301.13
 RD 16 cm.
 Medium fine buff ware. Pale green glaze i. and o., horizontal khakhi sgraffito i. Curved wall, almost

- carinated, outturned rim, rounded with slight concavities i. and o., bevelled i.
- 28 CN39 KP II S10 501.4
 RD 21 cm.
 Brownish buff ware. Light green glaze i., medium green o. Slightly curving wall, rounded rim with slight concavity o. above horizontal groove, slightly bevelled i.
 Parallels: Q9 E 1701.1 2 ex. green glaze KP I/II? (topsoil)
 R9 1702.1 brown glaze KP I/II? (topsoil)
 S10 1402.2 green glaze KP I/II
 S10 501.5 green glaze KP I
 S11 200.9 speckled green glaze, sgraffito i. cleaning
 201.4 3 ex. green glaze KP II
 203.7 dark green glaze o., light green i. KP I
 205.6 green glaze KP II
 207.1 green glaze KP II
 207.2 2 ex. green glaze KP I
- 29 CN110 KP I R10 1301.14
 RD 28 cm.
 Medium fine orange ware. Green glaze i. and o. Curving wall, slight ridge at bottom of rim which is round, slightly concave o. and i. and bevelled i.
 Parallels: L16 801.4 green glaze - small frag.
 S11 201.2 speckled green glaze, horizontal sgraffito i. KP II (topsoil)
 203.4 green glaze o., green, brown and white glaze with horizontal khakhi sgraffito i. KP II
 204.2 green glaze KP I
 205.4 green glaze KP II
- 30 CN31 KP II (topsoil) S10 501.2
 RD 21 cm.
 Fine light brown ware. Green glaze i. and o. Curved wall, almost carinated, insloping. Slight ridge at base of rim, rim concave o., rounded lip, rounded bevel i.
 Parallels: S10 501.3 2 ex. green glaze KP II
 S11 201.3 2 ex. green glaze KP II
 201.5 green glaze o. green, brown and white glaze i. KP I
 203.13 green glaze KP I
 203.17 green glaze KP II
- 31 CN151 KP II (topsoil) S10 501.2
 RD 22 cm.
 Fine pink/buff ware. Dark green glaze. Horizontal sgraffito lines i. Curved, insloping wall, slight ridge below rounded rim o., rim slightly concave i.
- 32 CN32 KP II (topsoil) S10 501.2
 RD 16-17 cm.
 Fine pinkish buff ware. Dark green glaze, thicker and darker inside rim. Incurving wall, grooved o. below rounded rim.
 Parallels: R11 602.2 green glaze KP I
 S10 500.2 green glaze cleaning
 501.2 green glaze - lip slightly more outturned KP II (topsoil)
 501.4 green glaze KP II
 502.3 green glaze KP I
- 33 CN50 KP I S10 502.4
 RD 23 cm.
 Coarse light brown gritty ware. Green glaze i. and o. Slightly curving insloping wall, rounded rim above broad groove swells externally and is concave internally.
- 34 CN45 KP I S10 501.5
 RD 19 cm.
 Pinkish buff ware. Green glaze, dark o. than i. Inward sloping wall, rounded rim narrowed i.
 Parallels: H22 1603.3 green glaze CP 2/3
 L16 805.1 green glaze
 R10 1301.14 green glaze KP I
 1302.2 green glaze KP II (topsoil)
 R11 603.2 green glaze KP I
 S10 500.3 green glaze cleaning
 500.5 2 ex. green glaze cleaning
 501.5 thicker wall - green glaze KP I
 501.8 3 ex. green glaze KP I/II?
 501.9 green glaze KP I/II?
 501.18 2 ex. green glaze, one with sharper lip KP I
 502.3 green glaze KP I
 502.5 green glaze KP I
 503.1 2 ex. green glaze KP I
- 35 cf CN106 KP II S11 201.5
 RD 21 cm.
 Fine brown ware (7.5YR 6/6). Greeny brown glaze i. with horizontal bands of sgraffito, mixed green and brown yellow o. with green drbbles from rim. Darker green around rim i. and o. Carinated wall, upper upright with roundish rim.

Comment: not really comparable with CN126.

- 36 CN35 KP II S10 501.3
RD 18 cm.
Fine brownish buff ware. Green glaze 1. and o., darker at rim. Upright wall, slight concavities o., roundish rim.
Parallels: L16 801.1 dark green glaze
801.3 green glaze
R10 1301.10 2 ex. green glaze KP I
R11 603.2 green glaze KP I
603.1 green glaze KP II
S10 500.2 green glaze, thicker wall cleaning
500.5 green glaze cleaning
S11 201.1 2 ex. green glaze KP II (topsoil)
203.7 green glaze KP I
203.14 green glaze KP I
205.2 green glaze KP II
- 37 CN49 KP I/II? S10 501.8
RD 21 cm.
Fine pinkish buff clay. Dark green glaze 1. and o. Incurving wall. Squarish rim.
Parallels: H22 1603.3 2 ex. green glaze CP 2/3
R10 1301.14 green glaze KP I
S10 501.14 green glaze KP I
- Fig. 31 *Glazed wares (kzle)*
- 01 and 02
- 38 CN53 KP I S10 501.18
RD 16 cm.
Fine brownish buff clay. Dark green glaze o. with single horizontal sgraffito line. Light green around rim o. and in vertical stripes on khakhi ground i. Oblique wall, simple round rim curving up slightly.
- 39 CN 9 KP I R11 603.2
RD 14 cm.
Fine pink ware. Green glaze with black blotches o., dark green to light green glaze with dark brown sgraffito i. Oblique wall, simple round upturned rim.
Parallels: S10 501.2 KP II (topsoil)
501.16 green glaze 1. and o. KP I
501.17 green glaze 1. and o. KP I
Previously published: McColl 1973a: fig. 12, no. 9
- 40 CN130 KP II Q10 E 1801.3
RD 20 cm.
Medium fine putty buff ware. Yellow brown glaze with brown black sgraffito i., yellow brown upper zone o. with white slip below.
- 41 CN113 KP II Q10 E 1801.3
RD 12 cm.
Fine pink ware (5YR 6/4). Yellow brown glaze around rim i. and o., patches of yellow and brown i. and yellow o.
- 42 CN27 KP II (topsoil) S10 501.1
RD 23 cm.
Fine pink ware. Light green glaze with dark patches i., khakhi glaze o. Flaring rim of bowl (?), rounded lip with slight depression i.
Parallels: J22 703.9 green glaze 1. and o. with black sgraffito CP 2/3
Q10 E 1801.12 green glaze 1. over rim, body o. white slipped KP I
S11 201.13 green glaze 1. and o. with black sgraffito KP I
cf CN149
- 43 CN46 KP I S10 501.6
RD 20 cm.
Pinkish buff clay. Khakhi glaze 1. and o. Flaring rim of bowl (?). Rounded lip.
Parallels: S11 205.6 green glaze 1. and o., black sgraffito KP II
205.9 green glaze 1. and o., black sgraffito KP I
- 44 CN119 KP I R10 1301.7
RD 21 cm.
Orange ware. Green glaze 1. and o., dark green sgraffito 1. Flaring rim of bowl (?). Rim slightly concave i., rounded lip. Mended with iron rivet.
- 45 CN112 KP I/II S11 201.4/203.15/200.2
RD 24 cm.
Fine light orange ware. Green glaze o., khakhi and green glaze 1. with khakhi sgraffito. White slip. Oblique wall, narrow upright rim, rounded lip.
- 46 ? ?

Ware? Green glaze 1. and o., single line of black sgraffito o. Oblique wall, simple rounded lip on

- rim with slight concavity i.
- 47 CN141 KP II (topsoil) S11 201.2
RD 22 cm.
Fine orange ware. Light green glaze o., and i. with dark green sgraffito. White slip. Flaring wall, narrow upright rim, rounded lip.
Parallels: S11 201.2 green glaze, black sgraffito KP II (topsoil)
- 48 CN121 KP I/II (topsoil) Q11 E 2201.1
RD 22 cm.
Fine drab ware. Green glaze with black sgraffito i., green glaze on upper exterior, unglazed below. Angled wall, upright round lip, concavity under rim.
- 49 CN137 Cleaning T9-11 2100.2
RD 20 cm.
Fine orange buff ware. Green glaze i. and o., lower body o. unglazed, black sgraffito i. Body flares outwards, upright pointed rim with rounded lip.
- 50 CN78 KP I/II R9 1403.1
RD 22 cm.
Fine orange ware. Green glaze i. and over rim, body o. unglazed. Black sgraffito i. Oblique body, (part of bowl lip), square rim.
Parallels: RIO 1303.2 KP I
- 51 CN43 KP II S10 501.4
RD 22 cm.
Fine brownish buff clay. Green and khakhi glaze i., green o. Oblique body (part of bowl lip), square rim, concavity i.
Parallels: S10 501.5 green glaze KP I
501.8 green glaze KP I/II?
- Fig. 32 Glazed wares (*kale*)
- 01
- 52 CN149 KP II S11 205.8
RD 20 cm.
Fine pink ware. Green to khakhi glaze with black sgraffito, khakhi glaze o. Shallow bowl with sloping wall, ridged i. at junction with long rim sloping at same angle as body. Rounded lip.
- 53 CN148 KP I S11 204.7
RD 22 cm.
Close orange ware. Light green glaze i. with leaf pattern in dark green and brown glaze, khakhi sgraffito. Green glaze o. Shallow bowl with sloping wall, ridged i. at junction with long rim sloping at same angle as body. Rounded lip.
Parallels: S11 201.12 KP I
- 54 CN44 KP II S10 501.4
RD 20 cm.
Grey ware. Green glaze i. and o. Two sgraffito lines around rim i. Shallow bowl with sloping wall ridged i. at junction with long rim sloping at a more oblique (flatter) angle than the body. Roundish lip.
Parallels: L16 801.3 brown glaze
- 55 cf. CN148 KP I S11 201.12
RD 22 cm.
Harsh gritty pink ware (5YR 8/4). Green glaze i. with black sgraffito, green glaze o. Shallow bowl with sloping slightly curved wall ridged i. at junction with flattish slightly concave rim. Roundish lip.
- 56 No CN no. KP I R11 604.1
RD 28 cm.
Fine pink ware. Green khakhi glaze i. and o., khakhi brown sgraffito i. Shallow bowl, body curving up to junction with long outward-flaring rim. Rounded lip.
Previously published: McNicoll 1973a: fig. 12, no. 18
- 57 CN54 KP I S10 501.18
RD 20 cm.
Pinkish buff clay, green glaze i. and over lip o. Below glaze o., a band of white paint, then reserved surface. Dark green sgraffito i. Shallow bowl curving up slightly to junction with outward-flaring rim. Thickened lip with two grooves o.
Parallels: R9 1400.1 green glaze i. and o. with black sgraffito cleaning
S11 204.9 green glaze i. and o. KP I
- 58 CN17 KP I R11 602.2
RD 32 cm.
Fine pink ware. Light green glaze i. and o., dark green pattern on rim i. with dark green sgraffito. Wall sloping to ridge i. at junction with outward-flaring convex rim. Rounded lip.
Parallels: Q9 1701.1 green glaze i. and o. with sgraffito KP I/II (topsoil)
R9 1400.1 green glaze i. and o. with sgraffito cleaning
R10 1301.3 green glaze i. and o. with sgraffito KP II (topsoil)
1301.5 green glaze i. and o. with sgraffito KP I

- 1302.2 green glaze i. and o. with sgraffito KP II (topsoil)
 S9 1102.1 green glaze i. and o. KP I/II (topsoil)
- 59 CN42 KP II S10 501.4
 RD 21 cm.
 Fine pink ware. Light green glaze i. with dark green sgraffito. 1.5 cm. band of light green glaze o., white paint below. Shallow bowl, wall curves up to ridge i., long slightly concave rim continues general line of wall. Squarish lip.
- 60 CN107 KP I Q10 E 1801.6
 RD 24 cm.
 Light brown fine paste fired brown to grey. Dark apple green glaze, rough textured i., with black sgraffito and 1 cm. over lip o. Body reserved below. Shallow bowl, wall curves up slightly to ridge i. Broad outward flaring rim. Squarish lip.
- 61 TK73/73; CN96 KP II (topsoil) R12 1901.2
 RD 24 cm.
 Fine pink brown ware. Green glaze i. and o. 1 cm. over lip o. Shallow bowl, heavy ring base with slight omphalos. Wall curving to ridge i. at junction with broad flaring rim. Rounded lip. Complete.
 Parallels: Q9 E 1704.1 green glaze i. and o. KP I/II?
 R10 1301.7 green glaze i., reserved o. KP I
 1301.14 green glaze i., reserved o., rim slightly more concave KP I
- Fig. 33 Glazed wares (Kale)
- 62 No CN no. KP I S11 203.7
 RD approx. 32 cm.
 Fine pinkish ware, simple dark green glaze i. and o. Fire blackened. Bowl with sloping wall, rim rounded o., with slight concavity i.
 Previously published: McNicoll 1972: 60, fig. 37, no. 4
- 63 CN33 KP II (topsoil) S10 501.2
 RD 20 cm.
 Fine brownish buff ware. Green glaze o. with stripes of blue (=decayed green glaze?). Black sgraffito. Interior green glazed? Bowl with wall curving upwards, flaring rounded rim.
 Parallels: S10 501.4 green glaze i. and o., wall thicker KP II
 S11 201.4 green glaze o. with black sgraffito, yellow glaze i. with brown sgraffito KP II
- 64 CN91 KP I? S8 1502.1
 RD 22 cm.
 Fine reddish brown ware (5YR 6/4). Green glaze i. and o. with black sgraffito. Flanged bowl with upward curving wall joining long outslipping rim with narrow upright rounded lip.
 Parallels: S11 201.5)
 201.13)
 204.5) dark green glaze i. and o., some frags with black sgraffito. Possibly from
 205.6) same vessel? KP I/II
 205.9)
- 65 CN2 KP II S10 501.2
 RD 30 cm.
 Fine orange pink ware. Exterior plain dark green glaze, interior blotchy green glaze with black sgraffito. Curving wall, outturned rim, rounded lip.
 Parallels: H21 1202.1 green glaze CP 2/3
 J22 701.4 green glaze CP 2/3
 Q10 E 1801.6 yellow brown glaze KP I
 1801.6 2 ex. green glaze, black sgraffito i. KP I
 1801.8 2 ex. green glaze, one with sgraffito i. KP I
 1801.12 dark green o., pale green i. KP I
 R9 1401.1 green glaze KP I/II (topsoil)
 1404.1 green glaze KP I/II
 S8 1502.1 yellow brown glaze with sgraffito i. KP I?
 S9 1201.2 green glaze KP I/II (topsoil)
 S10 501.9 green glaze KP I/II
 503.1 green glaze KP I/II
 Previously published: McNicoll 1973a: fig. 12, no. 2
- 66 CN128 KP I/II? Q9 E 1704.1
 RD 9 cm.
 Medium grey buff ware. Green glaze i. and over rim. Outside reserved. Wall slopes outward slightly, rounded rim protrudes o. with slight concavity on top. Cup?
- 67 CN6 KP I/II? S10 501.8
 RD 16 cm.
 Fine orange ware. Light yellow leaf green glaze o., slightly darker at rim, lime green glaze i. with dark yellow green at rim. Olive sgraffito i. Shape as no. 65.
 Previously published: McNicoll 1973a: fig. 12, no. 6
- 68 CN150 KP I S11 202.8
 RD 21 cm.
 Close pink ware (5YR 7/4). Light green glaze with black sgraffito i., green glaze o., light above dark.

- Lower body o. reserved. Bowl, wall curving up to a slightly everted rim with rounded lip.
- 69 of CN2 KP I S11 202.8
RD 18 cm.
Fine pinkish ware (5YR 6/4). Yellow glaze i. and o., darker at rim. Shape as no. 65.
- 70 CN11 KP I R11 602.2
RD 20 cm.
Fine pink ware. Dark green glaze o., interior glaze probably originally green, decayed (?) to iridescent blue and white. Bowl, wall curves to upright rim pinched in i. and o., rounded lip.
Parallels: R10 1301.10 green glaze i. and o. KP I
S9 1101.1 green glaze i. and o. KP I/II (topsoil)
S10 501.1 green glaze i. and o. KP II (topsoil)
502.4 green glaze i. and o. KP I
Previously published: McNicoll 1973a: fig. 12, no. 11
- 71 CN102 KP I Q10 E 1805.2
RD 19 cm.
Medium fine pink orange ware (5YR 6/4). Dark green glaze o. and over lip, paler green glaze i. Black sgraffito. Wall curves to upright rim bulges out slightly, bevelled i. Rounded lip.
Parallels: S11 201.2 KP II (topsoil)
- 72 CN153 Cleaning S11 200.9
RD 21 cm.
Fine orange ware (5YR 6/6). Light green glaze i. with khakhi sgraffito; green glaze o., dark green sgraffito. Bowl, slightly incurving wall, everted rim, bulges o., bevelled i.
- 73 No CN no. KP I S11 201.14
RD 18 cm.
Fine pink ware. Brown glaze i., yellow brown glaze o. Wall slopes in slightly, grooves below lip o., slight bevel i.
- 74 CN144 KP I S11 201.6
RD approx. 20 cm.
Fairly fine orange ware. Brown glaze i., brown glaze with yellow design o. Upright wall, two grooves o. below rounded, slightly everted lip.
- 75 CN82 KP I R10 1302.3
RD 17 cm.
Fine orange ware, green glaze i. and o. Bowl, incurving wall to ridge i. Rim everted with concavity i. and rounded lip.
- 76 CN146 KP II S11 205.2
RD approx. 14 cm.
Fine orange pink ware (5YR 6/4 to 7/6), green glaze i. and o. Bowl with slighted incurving to everted rim with flat top.
- Fig. 34 Glazed wares (kale)*
- 02
- 77 CN28 KP II (topsoil) S10 501.1
RD 22 cm.
Fine pinkish buff ware. Green glaze i. and o. Bowl, wall slopes out to simple rounded rim.
Parallels: (all green glazed unless otherwise noted)
J22 702.1 CP 2/3
702.2 CP 2/3
L16 802.1 ?Multi-coloured glaze
805.1
R9 1401.1 KP I/II? (topsoil)
S8 1502.1 KP I?
S9 1101.1 2 ex. KP I/II (topsoil)
S10 500.2 cleaning
500.3 cleaning
501.1 KP I (topsoil)
501.3 KP II
501.4 2 ex. KP II
501.5 KP I
501.8 2 ex. KP I/II?
501.9 KP I
501.18 KP I
502.9 KP I?
S11 201.1 with sgraffito KP II (topsoil)
201.10 KP I
- 78 No CN no. KP I S11 201.13
RD 26 cm.
Hard buff ware. Green glaze with black sgraffito i., green glaze with khakhi along rim o., lower body reserved. Outward-sloping wall, slight grooves below rim i. and o. Squarish lip.
Previously published: McNicoll 1972: 60, pl. 37, no. 5

- 79 CN37 KP II S10 501.3
 RD 24 cm.
 Brownish buff clay, dark patchy green glaze i. and o. Wall with steep outward slope, squarish lip.
 Small fragment only.
- 80 CN154 KP I S11 205.14
 RD 21 cm.
 Fine orange ware (5)R 6/6). Green glaze i. and over rim. Lower body o. reserved. Thick out-sloping wall slight indentation below rim which rises vertically o. to rounded lip.
- 81 CN93 KP I/II? (topsoil) Q9 E 1701.1
 RD 33 cm. 1702.1
 Fairly fine reddish brown ware. Green glaze i. and o. Black sgraffito i. Thick out-sloping wall, thinning towards rim which kicks up to narrow rounded lip.
- 82 CN120 KP II? (topsoil) Q11 E 2201.1
 RD 33 cm.
 Medium fine orange ware. Green glaze i and over rim. Body o. reserved. Black sgraffito i. Out-sloping wall, ridge o. below rounded lip.
- 83 CN140 KP II (topsoil) S11 201.2
 RD 38 cm.
 Medium fine orange ware. Green glaze i. and o., darker over rim i. Sgraffito dark brown and khakhi. Out-sloping wall, slight concavity below roundish lip.

Fig. 35 Glazed wares (kale)

- 02
- 84 CN139 KP I/II? T9-11 2101.5
 RD 28 cm.
 Buff ware. Light brown glaze i. with dark brown sgraffito. Band of dark brown glaze over lip; below, on band of light brown glaze dribble of green glaze continuing down over white slip and on to reserved lower body. Deep bowl with wall curving in to rim thickened o. ("almond rim").
 Parallels: S11 201.3 brown glaze KP II
 205.6 brown glaze KP II
- 85 CN7 KP I S10 501.17
 BD 10 cm.
 Fine pink ware. Dark green glaze i. and o. Black sgraffito i. Deep bowl wall curving in to rim thickened o. ("almond rim").
 Previously published: McNicoll 1973a: fig. 12, no. 7
- 86 CN30 KP II (topsoil) S10 501.2
 BD 28 cm.
 Fine orange brown ware. Light green glaze i. and o. Bowl with wall curving in. Carinated o. below rounded lip.
 Parallels: S11 201.2 yellow glaze with brown sgraffito KP
- 87 CN48 KP I/II? S10 501.8
 BD 12 cm.
 Fine pinkish buff ware. Medium to dark green glaze i. and o. Black sgraffito i. Bowl, wall curving to upright rounded lip. Slight ridge below rim o.
 Parallels: S9 1101.1 green glaze KP II (topsoil)
- 88 CN47 KP I/II? S10 501.8
 RD 24 cm.
 Coarse pinkish buff ware with grits. Dark green glaze i. and o. Deep bowl with wall incurving to long ribbed rim with thin rounded lip.
- 89 CN143 KP II S11 201.4
 Fine orange ware. Brown glaze o. with green dribbles, khakhi brown glaze i. with green horizontal lines. Rim sherd of upright bowl with long upright rim thickened o. Whittled into disc shape.
- 90 CN63 KP II? S9 1101.2
 RD
 Fine buff ware, green glaze i. and o. Bowl (?), upright wall, squarish rim thickened o.
 Parallels: J21 W 1001.9 green glaze CP 2
- 91 CN103 Surface
 RD 14 cm.
 Fairly fine pink buff ware. Dark green glaze i. and over rim, body o. reserved. Black sgraffito i. Small bowl, curved wall with protruding rim and rim and rounded lip.

Fig. 36 Glazed wares, bases (kale)

- 01 and 02
- 92 CN26 KP I S10 501.9
 ED 7 cm.
 Fine buff ware. Yellow glaze i. Unglazed o. High ring base, splaying and narrowing to foot.
 Parallels: H22 1603.5 green glaze i. CP 2/3
 Q10 E 1801.2 green glaze i. KP II (topsoil)
 R10 1301.10 green glaze with sgraffito KP I

- S10 501.4 green glaze KP II
Previously published: McNicoll 1973a: fig. 12, no. 26
- 93 CN19 KP II (topsoil) S10 501.1
BD 8 cm.
Fine pink ware with some grits. Green glaze i. with black sgraffito, unglazed o. Low ring base, rounded foot.
Parallels: J22 701.24 green glaze i. CP 2/3
L16 801.5 brown glaze i.
R10 1300.5 green glaze i. K cleaning
1301.5 green glaze i. KP I
Previously published: McNicoll 1973a: fig. 12, no. 19
- 94 CN25 KP I? S10 502.11
BD 8 cm.
Fairly fine orange ware. Green glaze i. with olive coloured sgraffito. Unglazed o. Upright squarish ring base of medium height.
Parallels: R10 1300.4 multi-coloured glaze with omphalos K cleaning
S9 1101.1 green glazed KP II (topsoil)
S10 501.11 green glazed KP I?
Previously published: McNicoll 1973a: fig. 12, no. 25
- 95 CN22 KP II S10 501.4
BD 10.5 cm.
Fine reddish brown ware. Yellow brown glaze i. with dark brown sgraffito. Unglazed o. Upright high ring base, squarish foot with bevelled outer edge.
Parallels: S9 1101.2 green glazed KP II?
Previously published: McNicoll 1973a: fig. 12, no. 22
- 96 CN23 KP II S10 501.3
BD 7.5 cm.
Fine buff ware. Light green glaze i. with khakhi sgraffito. Green glaze o. Interior of base unglazed. High ring base, splaying to squarish foot.
Parallels: J22 701.13 2 ex. green glaze CP 2/3
Q9 1700.1 2 ex. green glaze i., one with sgraffito K cleaning
Q10 E 1800.1 green glaze with sgraffito i. K cleaning
R9 1405.1 multi-coloured glaze i. KP I/II
R10 1302.4 green glaze i. KP I
S8 1302.1 green glaze i., with omphalos KP I?
S9 1101.1 green glaze i. KP II (topsoil)
1102.1 green glaze i., with omphalos KP II (topsoil)
Previously published: McNicoll 1973a: fig. 12, no. 23
- 97 CN24 KP I S10 502.1
BD 9 cm.
Fine orange ware. Dark green glaze i. with black sgraffito. Unglazed o. High ring base, splaying slightly to squarish foot.
Parallels: L16 801.3 green glaze i.
Q9 1701.1 green glaze i. KP I/II? (topsoil)
1702.1 green glaze i. KP I/II?
R9 1401.1 green glaze i. KP I/II (topsoil)
R10 1301.1 brown glaze i. KP II (topsoil)
1302.2 green glaze i. KP I
1302.4 multi-coloured glaze i. KP I
S9 1101.2 green glaze i. KP II?
1102.1 green glaze i. KP II (topsoil)
Previously published: McNicoll 1973a: fig. 12, no. 24
- 98 CN20 KP II (topsoil) S10 501.1
BD 10.5 cm.
Fine pink ware. Green glaze i. with black sgraffito. Unglazed o. Fragment of a metal (iron?) rivet. High upright ring base, squarish foot.
Parallels: Q10 E 1801.12 brown glaze i. KP I
R9 1400.1 green glaze i. K cleaning
R10 1302.5 green glaze i. with sgraffito KP I
- 99 CN14 KP II Q10 E 1801.3
BD 7.5 cm.
Medium fine orange ware. Pale green, yellow brown and aubergine glaze i. with khakhi sgraffito. Unglazed o. High ring base, splaying to roundish foot. Groove at junction of wall and base o.
- 100 CN29 KP II (topsoil) S10 501.2
BD 7 cm.
Pinkish buff ware. Yellow brown glaze i. with dark brown sgraffito. High ring base splaying to rounded foot. Groove at junction of wall and base o.
Parallels: S11 204.8 KP I
- 101 CN67 KP I/II? S9 1102.1
BD 8 cm.
Fine orange ware. Olive green glaze i. with black sgraffito. High ring base splaying to foot. Inner

wall of base concave outer wall bevelled to foot. Wall of vessel thinner than most other glazed bases.

Fig. 37 Glazed wares, bases (*kaia*)

01, 02 and C2		
102 CN125	KP I/II (topsoil)	T9-11 2101.2
BD 8 cm.		
Medium buff orange ware. Apple green glaze i. with dark green sgraffito. Unglazed o. High ring base flaring slightly to squarish foot.		
Parallels: S11 201.2 brown glaze i? KP II (topsoil)		
		202.8 2 ex. glazes lost KP I
103 CN79	KP II (topsoil)	R10 1302.1
BD 7 cm.		
Fine orange ware. Green glaze i. with black sgraffito. Unglazed o. Ring base slightly flaring to squarish foot.		
Parallels: R10 1300.4 green glaze i. K cleaning		
104 CN89	KP I	R10 1302.4
BD 5 cm.		
Fairly fine buff ware. Green glaze i. with dark green sgraffito. Unglazed o. Ring base. Upright with sloping inner wall, broad groove at junction of base and body o. Rounded foot.		
105 CN36	KP II	S10 501.3
BD 6 cm.		
Fine pinkish buff ware. Green glaze i. Unglazed o. Very shallow ring base of jar, rounded foot.		
106 CN94	KP I/II	R9 1404.1
BD 9 cm.		
Fine buff ware. Light green glaze i. Unglazed o. Narrow ring base, flaring to splayed foot.		
107 CN69	KP I/II (topsoil)	R9 1401.1
BD 6 cm.		
Fine orange ware. Green glaze i. and o. Disc base of jar, slight protruding rounded foot.		
108 CN100	KP I?	S8 1502.1
BD 4.5 cm.		
Fine cream ware (7.5YR 8/4). Royal blue glaze i. and o. Foot and bottom of base unglazed. Shallow ring base splaying and narrowing to foot. Omphalos?		
109 CN58	KP I	S10 501.16
BD 5.5 cm.		
Fine brownish buff clay. Light green glaze i. with black sgraffito. Unglazed o. High upright ring base bevelled o. to rounded foot.		
110 CN21	KP II (topsoil)	S10 501.1
	KP I/II	S11 201.2, 204.3
BD 3.6 cm.		
Greyish ware. Iridescent blue glaze i. and o. Low ring base, inner side slanting to rounded foot.		
111 CN139	KP II (topsoil)	S10 501.1
BD 4 cm.		
Close orange buff ware. Green glaze i. and o. Upright neck of juglet with slightly everted rounded lip.		
112 TK 73/67 CN88	KP I	R10 1301.8
RD 5 cm., H 31 cm., BD 6.4 cm.		
Close orange buff ware. Green glaze i. and o., bottom 2 cm. and base unglazed. Flat-based jug with body wall curving out then in to upright neck with thickened rim slightly protruding o. Two handles, round in section, from junction of neck and body to maximum girth. Two pairs of shallow horizontal grooves around neck above, and body below handles, and a single groove at neck-body junction.		
113 CN56	KP I	S10 503.1
RD 3.75 cm.		
Close grey brown ware. Green glaze i. and o. Neck of juglet, curving up to slightly everted rounded lip.		

Fig. 38 Glazed wares (*kaia*)

05 and 01/2

114 CN145	KP II	S11 205.2
Max. D 11.5 cm., BD 5 cm.		
Fine orange buff ware (5YR 6/3). Green glaze i. and o. except base. Open lamp with pinched-in spout, wall slopes out to simple rounded lip. Base slightly concave underneath.		
Parallels: S11 204.8 green glaze KP I		
114a TK 70/21 CN 131	KP II	S11 203.10
Max. L 8.8 cm., max W 7 cm., H 3.6 cm.		
Fine orange ware, evenly fired (5YR 7/6). Green glazed preserved o. only around lip, and covering all interior. Open lamp with pinched spout. Flat base. Wall slopes out and then turns up to rim. Scale: 1:2		

- 115 CN34 KP II S10 501.4
 RD and RD uncertain
 Fine brownish buff ware. Green glaze i. and o. Rim fragment of open pinched-nozzle lamp.
 Parallels: H21 1301.5 2 ex. dark green glaze i. and o. CP 2f
 L16 802.1 green glaze i. and o.
 R10 1301.2 green glaze i. and o. KP II (topsoil)
 S10 501.2 green glaze i. and o. KP II (topsoil)
- 116 CN101 KP I? S8 1502.1
 RD and BD uncertain
 Medium fine pink orange ware. Pale green glaze i. and o. Bottom o. unglazed. Fragment of pinched-in nozzle of open lamp.
- 117 CN112 KP I Q10 E 1801.9
 BD 4 cm.
 Medium fine pink ware (2.5YR 6/6). Green glaze i. and o. including base. Flat disc base, thick outward curving wall. Groove in wall at break. Function uncertain - a lamp?
- 118 CN123 KP I/II? R9 1403.1
 RD 12 cm., BD 8 cm., H 13 cm.
 Fine buff pink ware. Tiny spot of green glaze on rim. Funnel-shaped object with flattened foot slightly splaying o. Wall upright, then sloping to rounded rim with grooves. A pot stand?
- 119 CN40 KP II (topsoil) S10 501.2
 Body sherd
 Fine grey clay. Light green glaze i. and o. Khakhi sgraffito and background to raised champlévé floral decoration i. Bowl fragment.
- 120 CN152 KP I S11 201.14
 Body sherd
 Fine purple grey metallic ware (10R 5/1-6/1). Brown glaze with greenish tinge o. champlévé pseudo-calligraphic design i. in light green glaze on a dark brown background.
- Fig. 39 Glazed pottery from the church area*
- 02
- 121 CN14 CP 2 J22 702.2
 RD 16 cm.
 Fine pink ware. Slightly carinated vessel with simple upright rounded rim. Green glaze i. and o. Sgraffito scale pattern i.
 Parallels: R9 1401.1 clear glaze over white underpaint KP II
 S10 502.3 green glaze i. and o. KP I
- 122 CN8 CP 2/3 J22 703.10
 RD 18 cm.
 Fine pink ware. Incurving wall, with rim thickened o. Medium green glaze i. and o., with two dark green horizontal sgraffito lines o. Lower body o. unglazed.
 Parallels: R9 1401.1 green glaze i. and o. KP II
 S9 1102.1 2 ex. green glaze i. and o. KP I/II?
 S10 501.4 green glaze i. and o. KP II
 502.3 green glaze i. and o. KP I
- 123 CN124 CP 2 K21 103.1
 RD 10 cm.
 Fine pink buff ware. Curved wall, simple rounded rim. White glaze i. and o., dark green blobs of glaze around rim and two on o.
 Parallels: S11 201.4 2 ex. green glaze i. and o. with black sgraffito i. KP II
- 124 CN122 CP 2 B22 1602.2
 RD 22 cm.
 Fine grey ware. Oblique wall, simple rim. Black underpainted floral design i. under greenish blue glaze i. and o. Darker glaze around rim.
- 05
- 125 CN129 CP I or 2 B21 1209.2
 BD 4 cm., inner RD 3 cm., outer RD 6 cm.
 Medium buff paste. Flat base, outer wall sloping out, while inner curves in.
 Parallels: T9-11 2101.6 green glaze i. and o. KP II
 Compare CN 112 (fig. 38, 117).
- 126 CN70 CP 2/3 B21 1201.5
 L 5.3 cm., H 3.1 cm.
 Fine orange ware. Pinched spout fragment of blow-lamp. Bottle green glaze i. and o.
 Compare CN34 (fig. 38, 115)
- 127 CN66 CP 2/3 B21 1202.2
 L 6.1 cm., H 4.2 cm.
 Finched spout fragment of bowl-lamp. Green glaze i. and o., foot unglazed.
 Compare CN 145 (fig. 38, 114)

- 01 and 02 bases
- 128 No CN no. CP 2 J21 303.5
 HD 8.5 cm.
 Fine buff ware. High ring base. Green glaze i.
 Previously published: French et al. 1972:60
- 129 CN116 CP 2/3 H22 1603.3
 RD 7 cm.
 Medium fine orange ware. Ring base. Dark green glaze with black sgraffito in 'woven basketry' pattern
 i. Some of the sgraffito rectangles are cross-hatched.
- 130 CN74 CP 3 J21 1001.3
 BD 5 cm.
 Fine orange ware. High ring base. Green glaze i.
 Parallels: L15 801.2 green glaze i.
- C2
- 131 CN136 CP 2/3 J22 701.14
 RD 4 cm., BD 3.7 cm., H 7.3 cm.
 Fine pink ware. Small closed flat based vessel, bulging body, straight neck, lip thickened o. Medium
 green glaze i. and o. darker on lower body o. Base unglazed.
- 132 CN106 CP 2 H22 1602.4
 W 9.2 cm., H 9.6 cm.
 Light brown medium coarse ware (10YR 6/3). Body fragment of O1 shape. Light yellow brown glaze i. with
 dark sgraffito pattern, possibly part of a bird. Unglazed o.
- X4 or 6 (?)
- 133 CN109 CP 2 H22 1603.4
 BD 8.5 cm., RD 8 cm., H 5.5 cm., central hole D 3 cm.
 Chalky putty-green ware (10YR 8/3). Thick walled object with moulding o. and central hole. Pale apple
 green glaze o. Function uncertain.
- C2
- 134 CN135 CP 2/3 J22 701.9
 RD 4.4 cm., BD 4.1 cm., H 8.3 cm.
 As CN136 (fig. 39, 131), but lower body unglazed.
- 135 CN98 CP 2 H22 1604.1
 BD 5 cm., H 9.7 cm.
 Fine red ware. Shallow disc base, thick walled swelling body curving in to narrow neck. Remains of
 strap handle and spout on upper body. Green glaze i. and o. except lower body and base o.
- 136 CN134 CP 2/3 J22 701.25
 RD 4.3 cm., BD 4.3 cm., H 8.6 cm.
 As CN135 (fig. 139, 134)
 Parallels: S11 205.4 base only KP I
- Fig. 40 Glazed pottery from L15*
- 01 and 02
- 137 CN156 L15 801.2
 RD 16 cm.
 Fine yellowish ware (10YR 6/4). Shallow vessel with everted rim. Brown and yellow glaze i. and over
 rim. Body o. unglazed.
- 02
- 138 CN16a L15 801.2
 RD 22 cm.
 Fine pink ware. Curving wall of deep vessel, rim thickened o. Green glaze i. and o. (upper three cm.),
 darker on rim and lower sector o.
- 139 No CN no. L15 801.3
 RD 9 cm.
 Light pink ware (5YR 6/4). Thick curving wall to narrow upright rounded rim. Green glaze i. with
 splashes and streaks o.
- 140 CN155 L15 801.1
 RD 23 cm.
 Light pink ware. Thin upright wall, simple rim slightly outturned.
- 141 CN157 L15 801.3
 W 8 cm., H 6.7 cm.
 Fine yellowish ware (7.5YR 7/4). Fragment of large O2 vessel. Glaze in yellow and brown depicting
 flowers i. (NB drawing shows green instead of yellow). Brown glaze o. with vertical streaks of yellow.
 Lower sector o. unglazed.

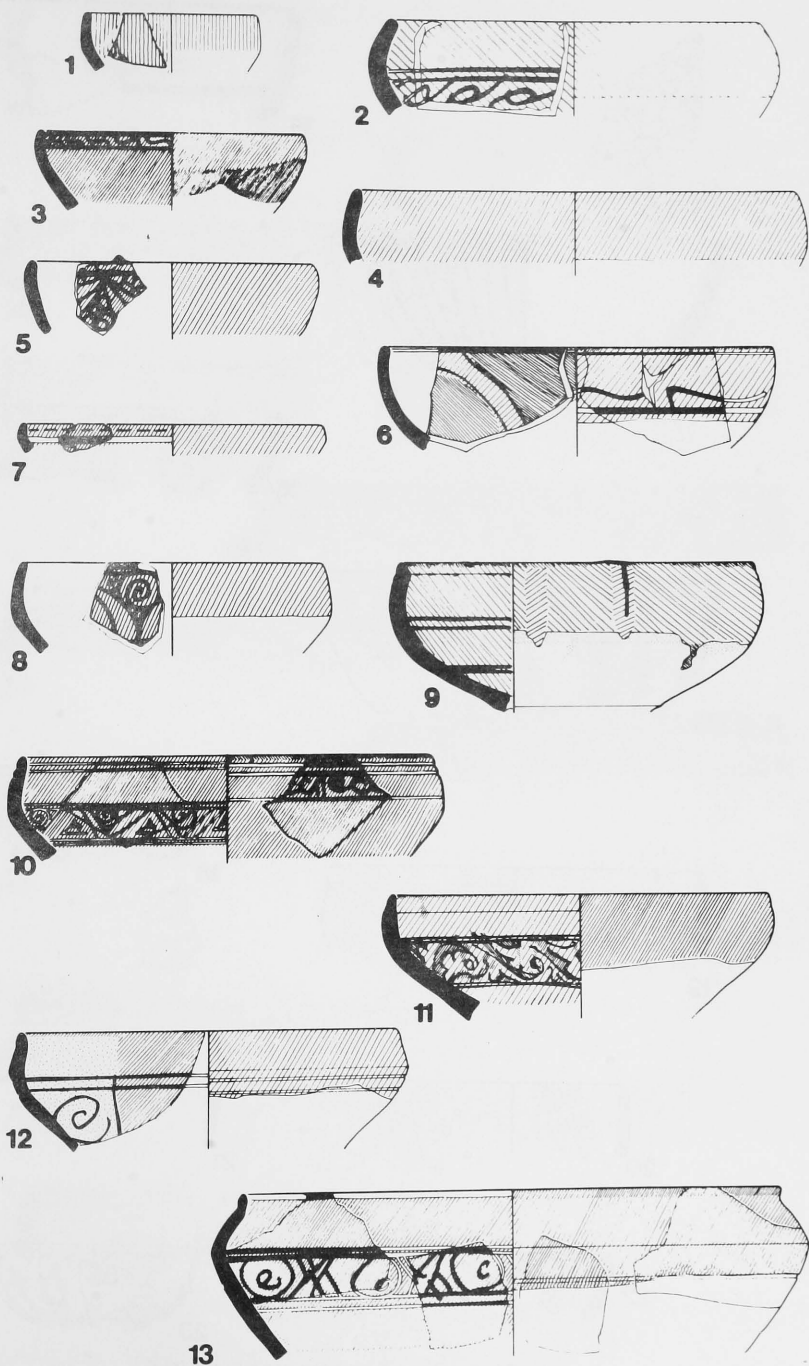


Fig. 28 Glazed ware (kale)

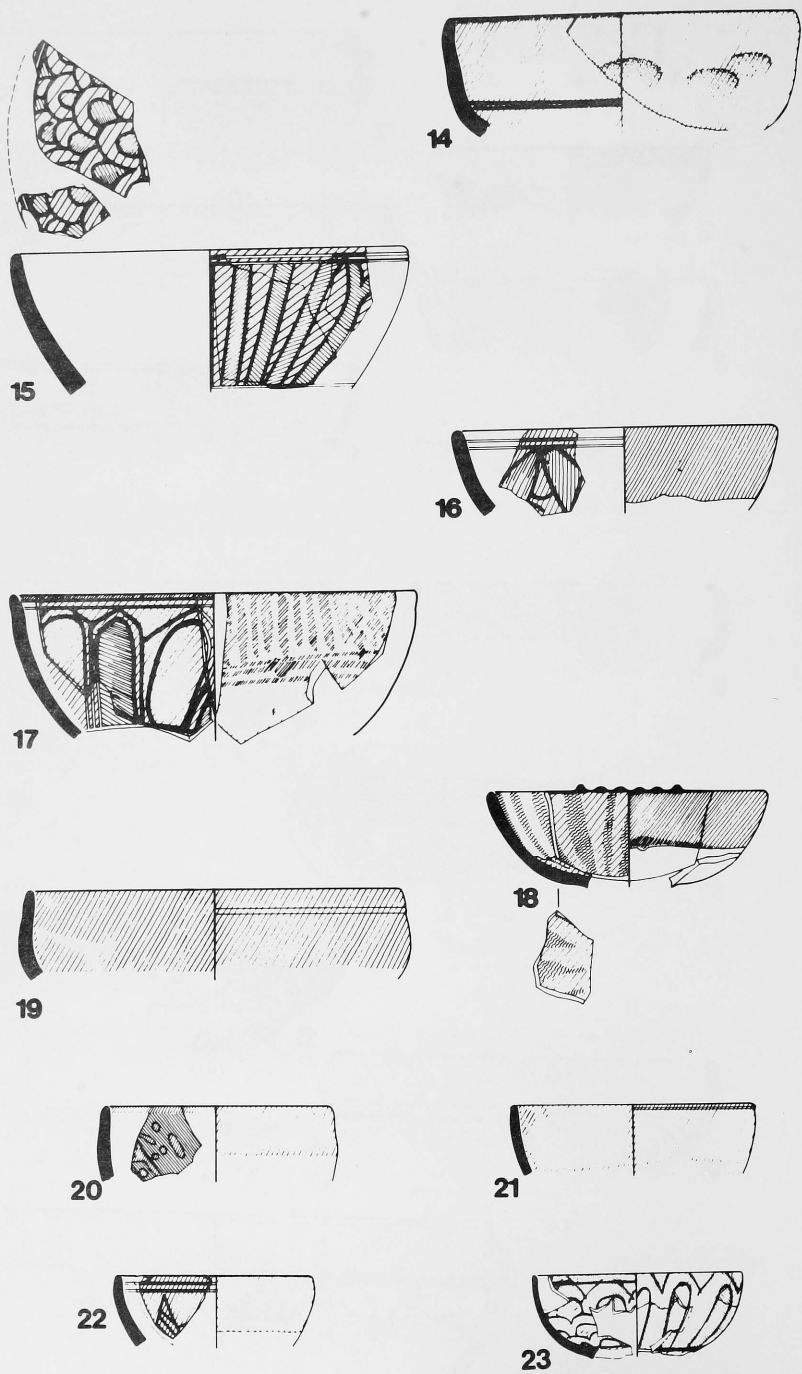


Fig. 29 Glazed ware (1-2-3)

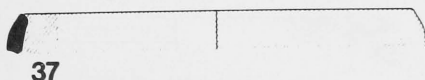
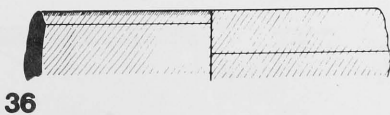
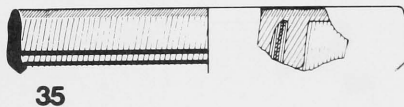
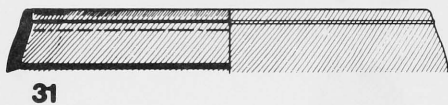
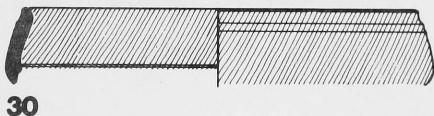
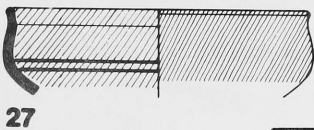
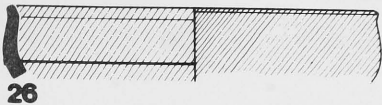
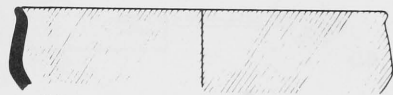
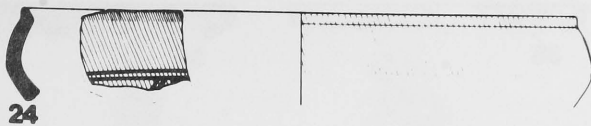


Fig. 30 Glazed ware (kale)

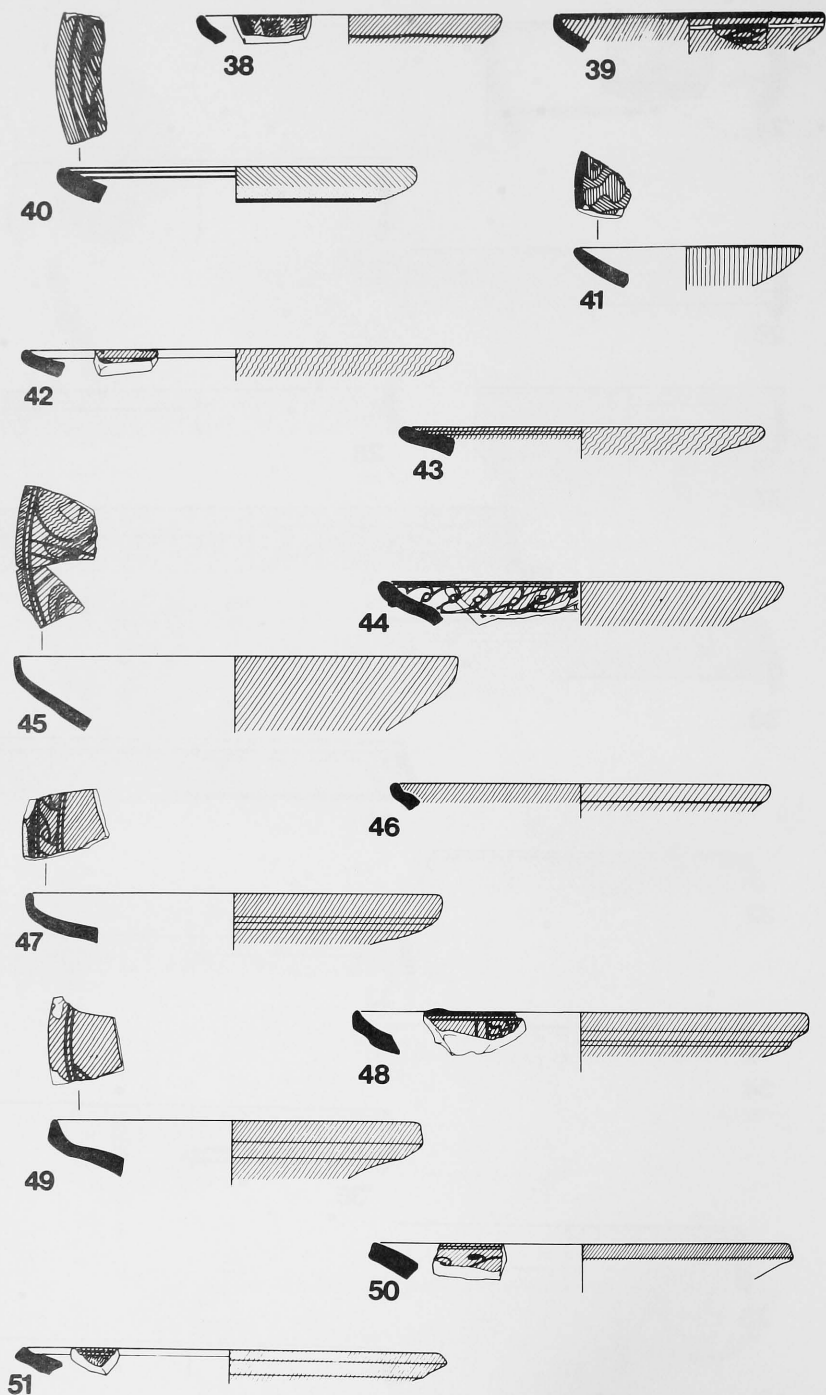


Fig. 31 Glazed ware (kale)

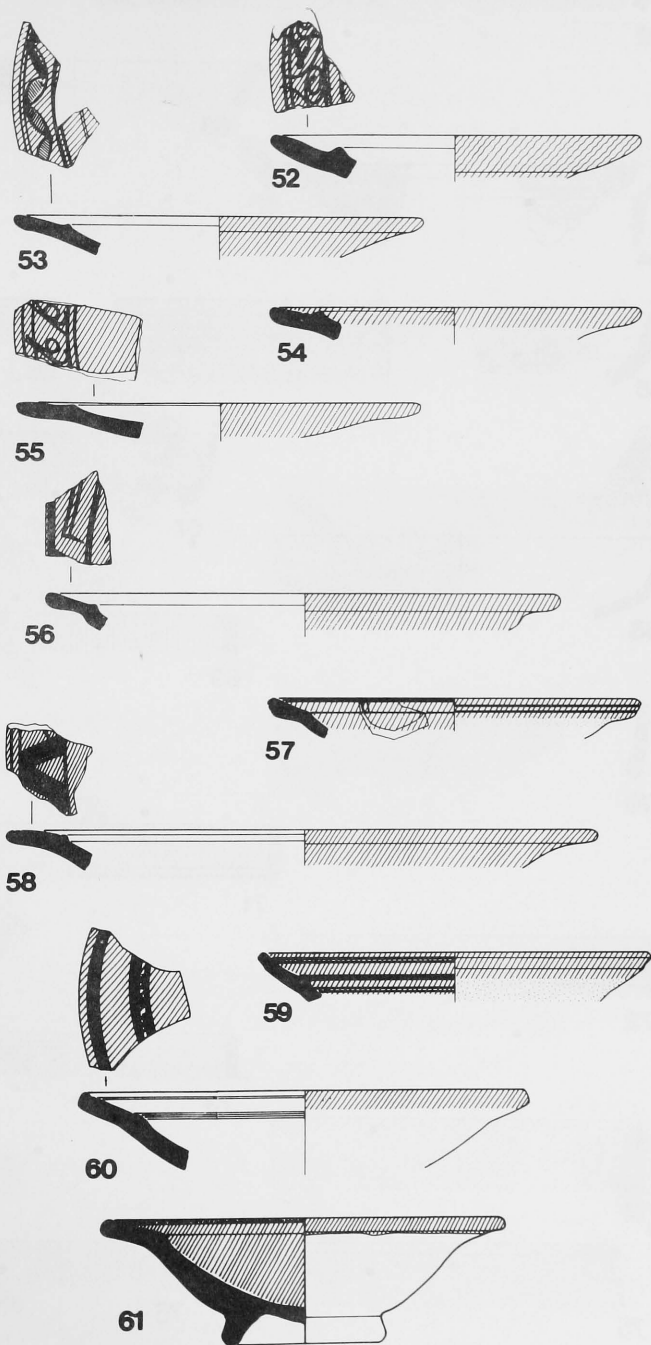


Fig. 32 Glazed ware (kale)

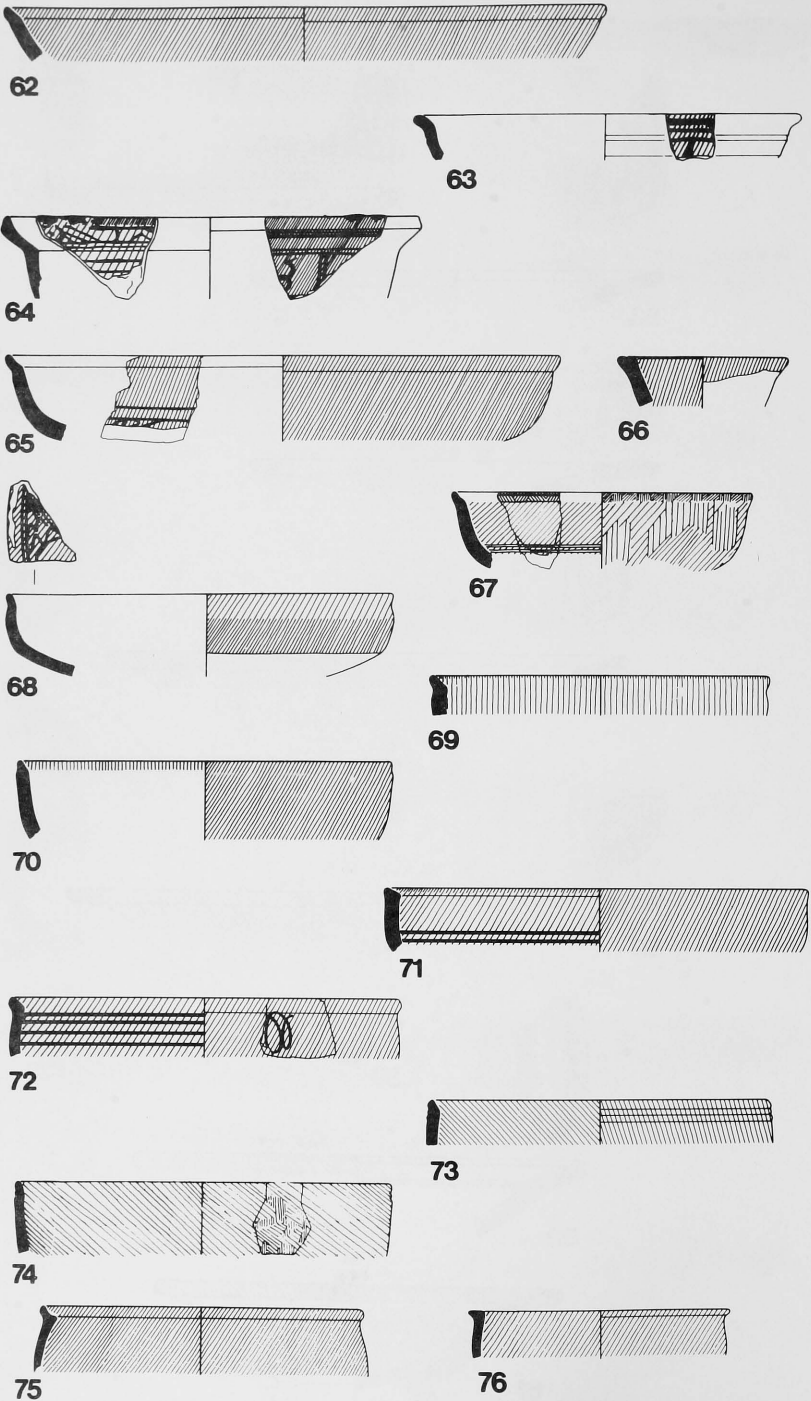


Fig. 33 Glazed ware (kaoli)

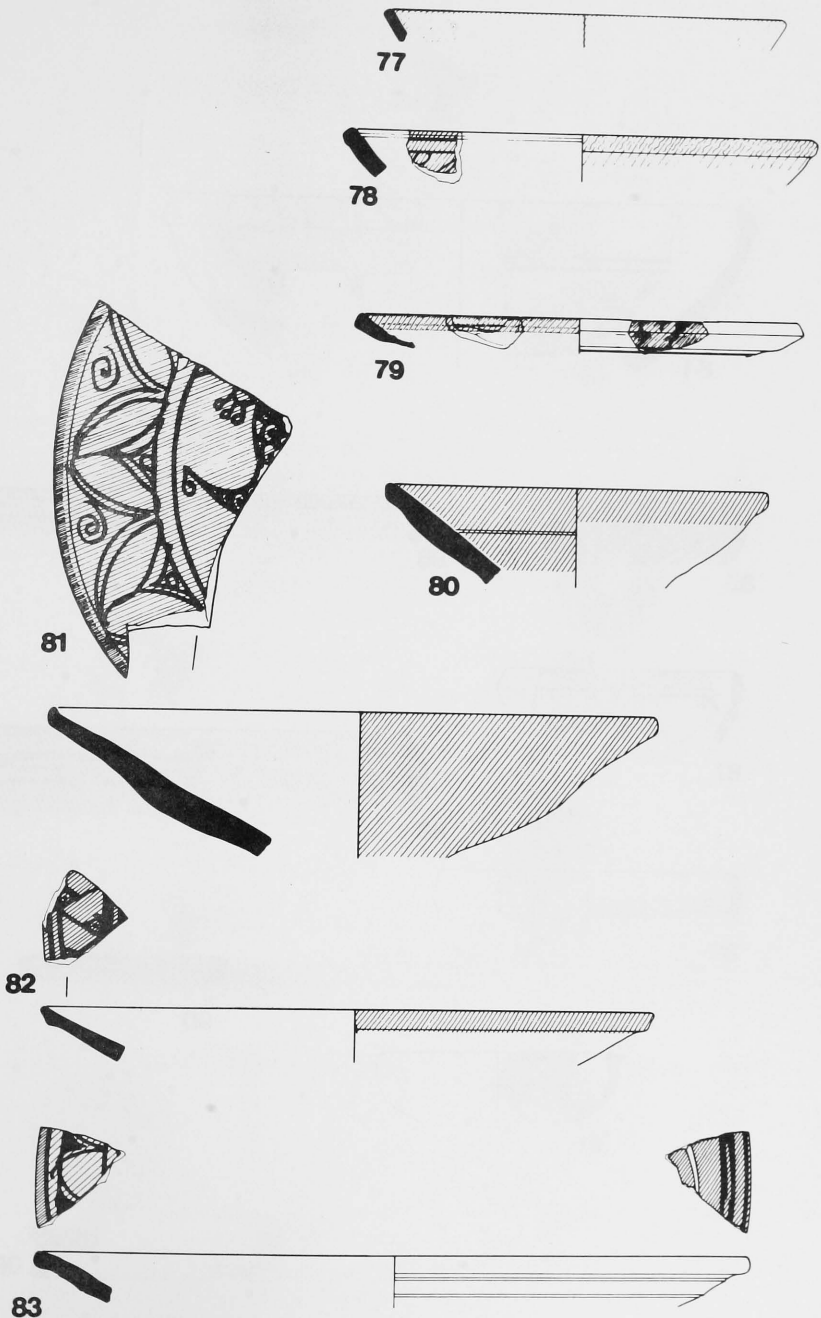


Fig. 34 Glazed ware (kale)

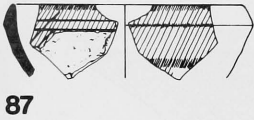
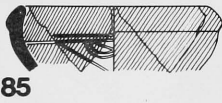
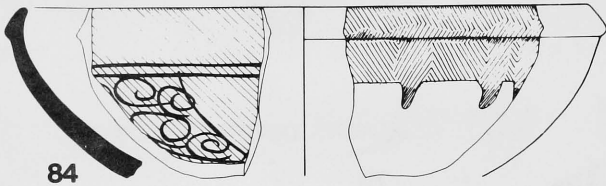


Fig. 35 Glazed ware (kashimono)

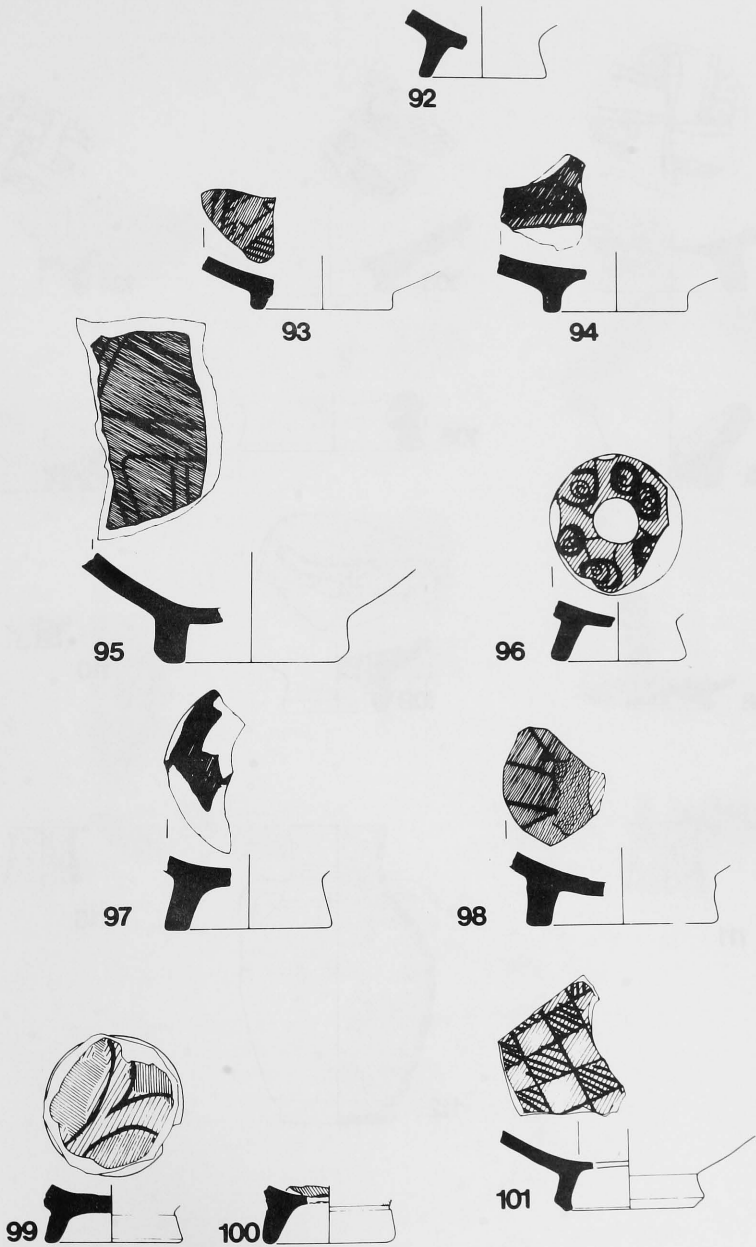


Fig. 36 Glazed ware (kale)

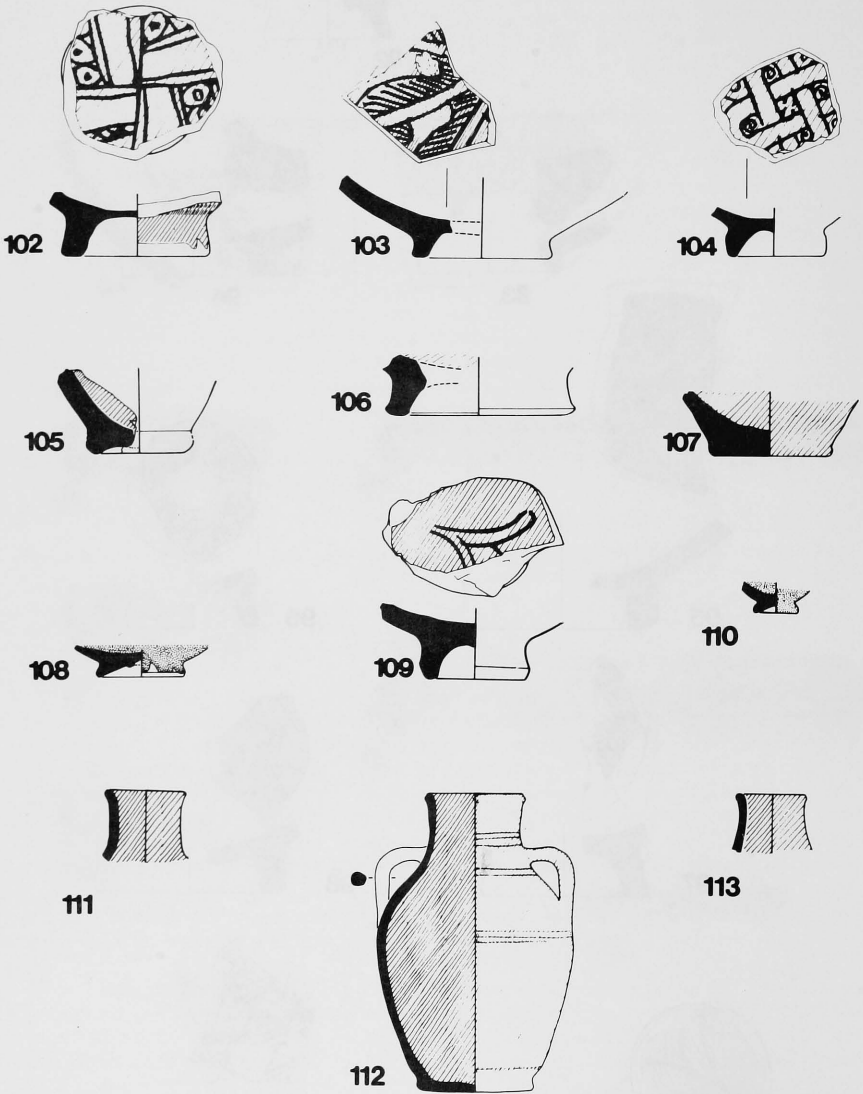
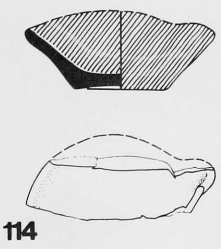
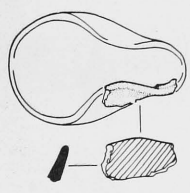


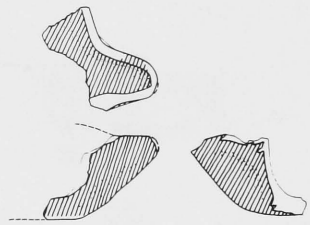
Fig. 37 Glazed ware (kale)



114



115



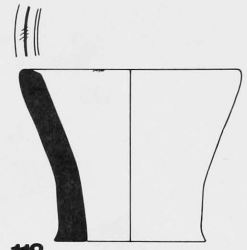
116



119



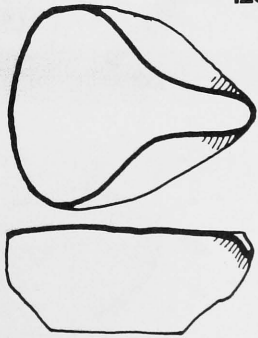
117



118



120



114a

Fig. 38 Glazed ware (kale)

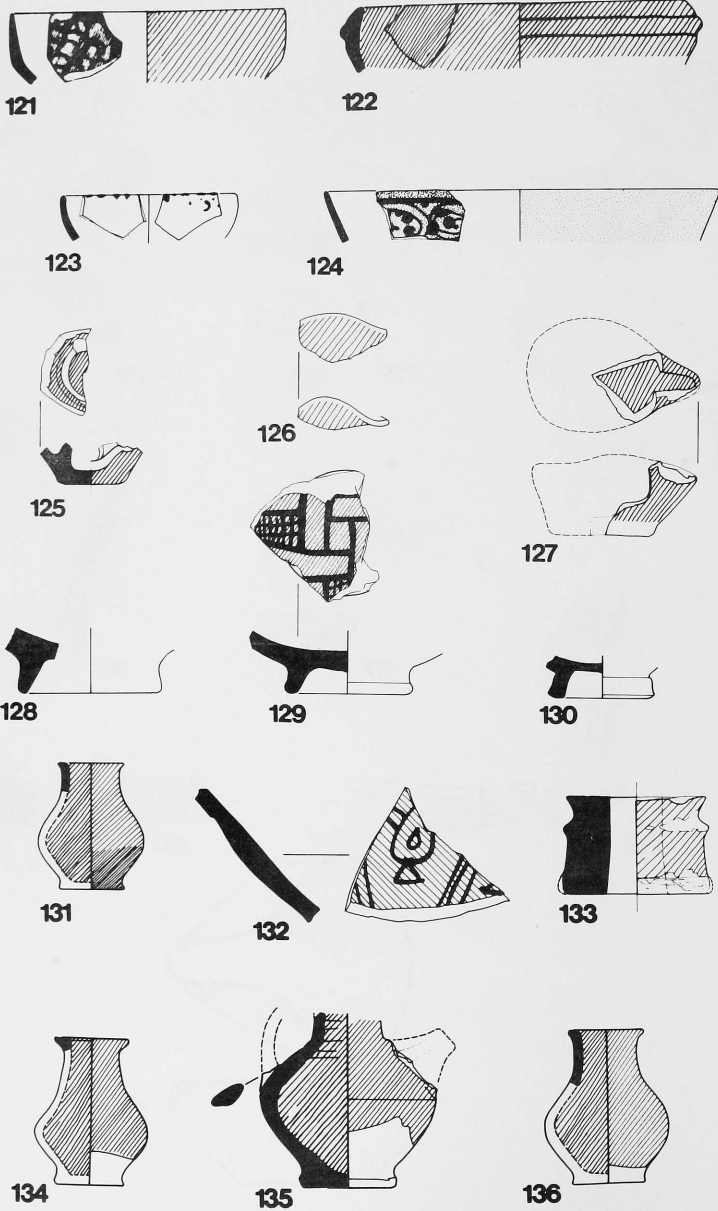
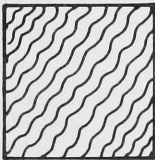
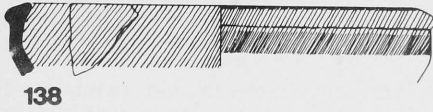
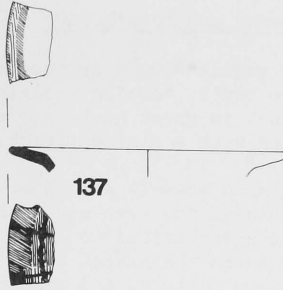
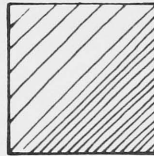


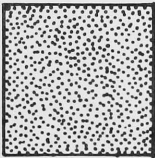
Fig. 39 Glazed ware from the church area



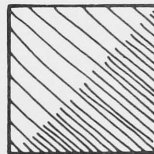
KHAKI



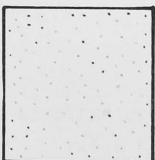
GREEN
LIGHT/DARK



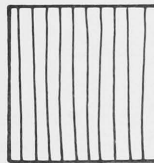
DARK BLUE



BROWN
LIGHT/DARK



WHITE UNDER-
PAINT



YELLOW

FIG. 20 Glazed ware from L15 and glazed conventions

Unglazed pottery: wares and manufacture

The bulk of the unglazed ware shapes is those of large vessels - storage jars, storage bowls, cooking vessels, water jars, and so on. Bowls do occur, but not in great numbers; obviously this was a class more suitably executed with a glazed finish.

Most of the unglazed vessels are wheel-made. Only occasionally were vessels hand-moulded, and even more rarely were they made in a mould. In most vessels inclusions could be seen; these were generally larger than those found in the glazed pottery, and included quartz particles, (?) ground-up pottery, and most commonly white (limestone?) grits. Mica inclusions are also quite common. The overall effect is of grittiness and coarseness in most of the wares, a notable exception being ware 7, which is comparable with the glazed ware.

Decoration is applied, incised, impressed and painted. Painted decoration is most common, with a preference for a matt red paint on the exterior of the vessel. Brown is also found, but infrequently. Occasionally the paint is applied in a pattern, usually criss-cross, but more frequently it simply covers the whole of the upper part of the exterior. CN4378 (fig. 53, 57) and CN4446 (fig. 53, 59) are made of a rather finer ware, which is then slipped with red paint before being decorated with a white painted design. CN4446 is also burnished.

Plastic and impressed decoration is also common. On the large vessels 'piecrust' impressions are frequently found around the rim. On smaller storage vessels stamped designs occur. But most popular were incised wavy lines, dots and oblique parallel slashes, executed with a pointed implement. On lids in particular impressed designs were common.

As mentioned, very few examples of vessels made in moulds were found at Taşkun Kale, and it is unlikely that this sort of pot was locally made (fig. 53, 56 and fig. 77, 228-230).

The unglazed medieval pottery of Taşkun Kale is classified according to seven basic wares. An eighth category was devised for miscellaneous sherds. The wares defined by us involve different criteria - paste composition, firing reduction or oxidation, surface finish. They are therefore treated as subordinate to classification according to shape.

Ware 1 (W1) - dark ware

Description: Coarse, gritty, drab and dark, even when not blackened by later burning. Apparently fired in a reducing atmosphere. Munsell readings around 5YR 3/1.

Occurrence: Less than 12% of type series. Various vessels.

Ware 2 (W2) - light ware

Description: Gritty and coarse, but not fired in a reducing oven and therefore lighter than W1, to which it is related. Munsell readings around 5YR 7/4.

Occurrence: About 40% of type series. Most bowls, storage bowls, some storage jars, some jugs.

Ware 3 (W3) - brown ware

Description: Coarse, brown paste with white grits and occasional mica flecks. Munsell readings around 5YR 5/4.

Occurrence: About 24% of type series. Most common ware for cooking vessels; also found in bowls.

Ware 4 (W4) - light burnished ware

Description: Paste similar in appearance to W2. Outside surface has a burnished slip "of quite exceptionally good quality for the period" (Margaret Wheeler). Munsell readings around 5YR 7/4.

Occurrence: Uncommon. A few bowls, a jug.

Ware 5 (W5) - plain ware

Description: Less gritty than W2. Usually buff or pink. Munsell readings around 5YR 6/6.

Occurrence: Infrequent - about 5%. Mainly jugs.

Ware 6 (W6) - hard coarse pink ware

Description: Gritty, hard, coarse paste. Munsell readings around 5YR 6/6 (although CN4178 [2.5YR 5/4] appears to be of this class).

Occurrence: Uncommon. A few 'flagons' and bowls.

Ware 7 (W7) - fine ware

Description: Buff or pink fine paste. Usually painted red or brown. Comparable with the ware of glazed vessels. Munsell readings around 5YR 6/4.

Occurrence: Uncommon - about 3.5%. Only bowls.

Ware 8 (W8) - indeterminate wares

Description: Varying colours, pastes and firings make it impossible to classify many sherds as belonging to one of the wares 1-7 above.

All unglazed ceramic vessels of KP I, KP II, CP 2 and CP 2/3 are wheel-made unless otherwise stated.

All figs scale 1:3, unless otherwise stated.

Medieval unglazed pottery (KP I-II and CP 2/3) catalogue

Fig. 41 Unglazed wares (kaile)

- C1
1 TK73/63 CN 4317 KP I S11 201.17
RD 28 cm., H 78 cm., max. D 54 cm.
Coarse pink grey ware (W2). Flat base, slightly protruding. Egg-shaped body with four evenly spaced ridges o. Scale 1:6.

Fig. 42 Unglazed wares (kaile)

- C1
2 CN 4182 KP II (topsoil) R9 1401.1
RD 24 cm.
Grey, gritty paste with white flecks (W2). Neck wall curves slightly inward; squarish rim flares outward and is bevelled. Painted red o. and over rim; irregular line of incised circles on neck o.
Parallels: R9 1401.1 KP II (topsoil)
Q10 E 1801.12 incised circles on interior angle of rim and on neck o; small indentations on lower rim edge o. KP I
- 3 CN4316 KP II (topsoil) R10 1302.1
RD 28 cm.
Medium coarse pink grey ware, fired self (W2); neck wall curves outward to bevelled squarish flaring rim.
Parallels: H22 1602.6 CP 2
R12 1903.1 heavier version KP II
S11 201.2 KP II (topsoil)
- 4 CN4430 KP II S11 205.2; 207.1
RD 19 cm. (2 frags)
Coarse gritty brown ware (W3); neck widens gently to bevelled squarish flaring rim. Red paint on rim and o.
- 5 CN4472 KP I S10 501.5
RD 16 cm.
Coarse pink ware (W2). Neck curves slightly out to flaring bevelled squarish rim.
- 6 CN4238 KP I R9 1402.2
RD 20 cm.
Drab brown gritty ware, fired self colour at surfaces, black (W3, 5YR 5/3). Neck upright, flaring bevelled squarish rim.
Parallels: R10 1301.10 KP I
- 7 CN4066 KP I R11 602.3
RD 24 cm.
Gritty coarse red grey ware, firing reddish brown at surfaces (W8). Upright neck, bevelled rim, generally squarish but with rounded edges to lip.
- 8 CN4132 KP I S10 501.5
RD 20 cm.
Coarse buff grey ware (W2). Neck curves out slightly to flaring squarish rim. Lower edge of lip protrudes to form a ridge.
Parallels: H21 1202.14 CP 2
R9 1401.1 KP II (topsoil)
- 9 CN4292 KP I R9 1403.1
RD 24 cm.
Coarse orange ware (W2, 5YR 6/4). Upright neck to flaring bevelled rim. Lip squarish but underside of rim bulges.

Fig. 43 Unglazed wares (kaile)

- C1
10 CN4412 KP I Baulks 2401.3
RD 30 cm., H 80 cm., max D 57.5 cm.
Drab ware (W8). Ovaloid body, flat base, above which is a band with finger-impressed decoration. At the point of maximum girth is a second undecorated band. The rim has two overhangs each of which is decorated with a row of finger impressions. Scale 1:7.5

Fig. 44 Unglazed wares (kaile)

- C1
11 CN4436 KP I S11 204.7
RD 42 cm.
Grey brown coarse ware firing buff at surface (W8, i. 10YR 3/1; o. 10YR 7/3-8/4). Neck curves into massive squarish everted rim with rounded edges and recessed plicrust decoration on lower exterior edge.
- 12 CN4325 R15 2001.2
RD 32 cm.
Brown coarse ware with white grits (W3). Neck slopes in to massive everted lip with rounded edges and

slight concavity in top. Piccrust decoration (finger impressed) on lower exterior edge.

- 13 CN4064 KP I S10 501.18
RD 30 cm.
Orange coarse ware (W2). Thick upright neck, massive squarish everted rim. Finger-pinned and impressed decoration above lower edge of lip.
Parallels: H22 1401.2 undecorated CP 2/3
L16 807.4
R9 1403.1 smaller indentations KP I
Previously published: McNicoll 1973a: fig. 15, no. 12
- 14 CN4063 KP I S10 501.17
RD 24 cm.
Grey coarse ware (W1). orange paint o and possibly i. Upright neck, rim thickened and flaring slightly. Below rim o, a band, thumb-impressed.
Parallels: Q11 2701.1 lighter impressions KP II (topsoil)
R10 1302.4 KP I
S10 501.15 KP II
Previously published: McNicoll 1973a: fig. 15, 11
- 15 CN4315 KP I Q10 1801.9
RD 29 cm.
Putty grey coarse gritty ware fired self colour (W2). Body curves in to short upright neck with everted rim. Piccrust decoration on lower lip.
Parallels: K21 103.8 CP
S11 205.6 more massive KP II

Fig. 45 Unglazed wares (kale)

C1

- 16 TK73/69 CN 4318 KP I R10 1302.9
RD 32 cm., H 103 cm., max. D 71 cm.
Grey pink coarse ware fired self colour (W8). Egg-shaped body, flat bottom; three bands and one ridge around body. Short inward-sloping neck, massive outturned rim with rounded edges. Hole 1.8 cm. in diameter bored in body 58 cm. above base. Scale: c.1:6
Parallels: TK 73/80 T9-11 2102.5 KP I/II This vessel has six ridges and 'piccrust' decoration on its rim - H 98 cm., max. D 70 cm.

Fig. 46 Unglazed wares (kale)

C1

- 17 CN4060 KP I/II S10 501.8
RD 30 cm.
Coarse purple ware, grey coat (W8). Neck sloping inwards, massive squarish everted rim with flat top.
Parallels: H21 1201.2 CP 2/3
H21 1202.2 CP 2/3
H21 W 1207.4 slightly smaller CP 2/3
L16 801.4 with flatter top
L16 801.6
Q9 E 1704.1 2 ex. KP I
Q10 E 1801.2 KP II
Q10 E 1801.5 KP II
R9 1403.2 slightly smaller KP I
R10 1302.4 KP I
1303.1 KP II
S9 1102.1 KP I/II
S10 501.3 KP II
501.15 KP II
S11 201.4 KP II
201.15 KP I
207.1 with 'piccrust' KP II
Previously published: McNicoll 1973a: fig. 15, 8
- 18 CN4416 KP II (topsoil) S11 201.1
RD 48 cm.
Coarse, gritty, black brown ware, possible self slip o. (W1). Massive rounded everted rim on upright neck.
- 19 CN4110 KP I/II S10 501.4; 502.9; 501.16
RD 29 cm.
Orange buff, coarse, gritty ware, fired self colour, slightly paler at core (W2). Inward-curving neck, massive everted rim with squarish angles.
Parallels: H22 1602.2 2 ex. CP 2
R9 1401.1 KP I/II
1404.1 'piccrust' KP I/II
R10 1301.5 lighter KP I
1301.7 2 ex. KP I
1302.6 KP I
1302.10 3 ex. 'piccrust' KP I
S9 1101.1 KP II
S10 501.6 KP I
S11 501.4 KP II

- 20 CN4054 KP II S10 501.4
 RD 24 cm.
 Grey red, coarse, gritty ware, firing reddish brown at surfaces (W8). Upright neck, thickened, everted rim.
 Parallels: R9 1404.1 KP I/II
 R10 1302.1 KP II
 1303.3 red painted rim KP II
 R15 2001.2
 S9 1101.1 heavier KP I/II?
 S10 501.4 3 ex. KP II
 501.13 with 'piecrust' KP II
 503.1 2 ex. KP I
 S11 201.2 KP II
 205.6 KP II
 207.1 KP II
 H21 1301.2 2 ex. CP 2/3
 Previously published: McNicoll 1973a: fig. 15, 2
- 21 CN4298 KP I R10 1301.4
 RD 26 cm.
 Brown coarse gritty ware, black core (W3). Inward curving walls, thickened, rounded, protruding rim.
 Parallels: Q10 E 1801.6 with indentations KP I
 L16 801.1
 L16 801.4
- 22 CN4407 KP II? Baulk 2404.2
 RD 35 cm.
 Coarse drab ware with white grits (W3 or 8). Thick wall upright i., outsloping o. Thick rim bulging o., two grooves on top.
- Fig. 47 Unglazed wares (*kale*)
- 23 CN4413 KP I/II? Baulk 2401.3
 RD 35 cm., H 92.5 cm., max. D 66 cm.
 Drab ware (W2). Globular form with four ridges around body. Flat base with piecrust decoration above. Massive whole mouth with triangular rim, on which are four pairs of indentations. Scale 1:7.5
- Fig. 48 Unglazed wares (*kale*)
- C1
- 24 CN4053 KP II S10 501.3
 RD 38 cm.
 Gritty, coarse, dark ware firing pink at the surfaces (W2). Hole-mouth vessel, thickened triangular rim, flat on top, slight lip o.
 Previously published: McNicoll 1973a: fig. 15, 1
- 25 CN4265 KP I/II? Q9 E 1702.1
 RD 28 cm.
 Gritty brown ware (W3). Inward curving walls to hole-mouth; protruding flat topped rim grooved o., with indentations along lower lip. Wavy incised lines in body o.
- 26 CN4288 KP I/II? R9 1403.1
 RD 35 cm.
 Coarse buff ware (W2). Slightly inclined neck, massive protruding rim.
 Parallels: H22 1601.6 with 'piecrust' decoration on lower edge of rim CP 2/3
 L16 801.3
 L16 802.1
 S11 201.1 with 'piecrust' decoration on lower edge of rim KP II
 201.4 with 'piecrust' decoration on lower edge of rim KP II
 205.8 with 'piecrust' decoration on lower edge of rim KP II
 R9 1403.1 KP I/II?
 R12 1903.2 KP I
- 27 CN4070 KP I R11 605.2
 RD 28 cm.
 Coarse gritty brown black ware, firing red o. Black and grey i. (W8). Inward-inclining body, triangular rim protruding o. with indented holes on flat top.
 Parallels: Q9 E 1702.1 rim protrudes a little more than type sherd KP I/II?
 Previously published: McNicoll 1973a: fig. 15, 18
- 28 CN4154 KP I/II S9 1101.2
 RD ca. 25 cm.
 Grey gritty ware (W2). Upright wall, short protruding triangular rim.
 Parallels: R10 1303.5 KP I
 S8 1502.1 rim protrudes less than type sherd KP I?
- Fig. 49 Unglazed wares (*kale*)
- C1/C2
- 29 CN4346 R15 2001.1
 Coarse buff paste fired self o., grey at core (W7). Neck curves o. to large triangular rim with finger

indentations. Painted red o. and approximately 2 cm. 1. over rim.

- 30 CN4239 KP I/II? R9 1402.2
 RD 22 cm.
 Gritty coarse red ware with white specks, grey core (W2). Upright neck, outturned rim, the lower edge of which is decorated with small scales. Oval shaped impressions with hatched design around neck.
 Parallels: Q10 E 1805.2 undecorated KP I
 R10 1303.4 undecorated KP I
 S11 201.4 undecorated KP II

Fig. 50 Unglazed wares (*kale*)

C1/2

- 31 CN4067 KP I R11 602.4
 RD 22 cm.
 Coarse gritty reddish ware with grey core (W3). Upright neck, everted rim with flat top.
 Previously published: McNicoll 1973a: Fig. 15, 15
- 32 CN4428 KP II S11 203.3
 RD 16 cm.
 Rather coarse gritty pink brown ware, grey core (W5 - surfaces 7.5YR 6/4-7/4). Upright neck with squarish projecting rim.
- 33 CN4066 KP I R11 602.4
 RD 20 cm.
 Coarse gritty light brown ware (W3). Upright neck with squarish projecting rim.
34. No CN no. KP I S11 203.7
 RD 16 cm.
 Gritty buff ware (W2). Upright neck with squarish projecting rim.
 Previously published: French et al 1972: pl. 37, 12
- 35 CN4286 KP I R10 1303.3
 RD 25 cm.
 Coarse gritty brown ware, black at core (W3). Body wall curves into upright neck, heavy rim projects o. Ridge with impressed dents on neck.
 Parallels: S11 202.7 no ridge - vertical slashes on rim o.
- 36 CN4350 KP I/II? T9-11 2101.7
 RD 16 cm.
 Very coarse purple pink ware with white flecks and mica (W3 or 8). Neck upright, rim thickened, rounded and protruding externally; lower ridge on neck externally. Decorated with two incised bands of straight lines enclosing small diagonal gashes.
- 37 CN4268 KP I/II? Q9 E 1702.1
 RD 15 cm.
 Coarse hard grey ware (W1?). Upright neck, slightly concave i. below flattish rim. External ridge below rim decorated with small cuts in herringbone pattern.
- 38 CN4071 KP I R11 606.2
 D 16 cm.
 Coarse grey ware (W1?). Upright neck curving o. slightly rounded rim with external ridge on neck o.
 Previously published: McNicoll 1973a: fig. 15, 19
- 39 CN4343 KP I/II R12 1904.1, 1901.1
 RD 16 cm.
 Coarse pink orange ware with white grits with grey core (W6 5YR 6/6). Body curves in to shoulder. Neck upright, rim everted and lipped. Ridges on neck and shoulder, incised wavy lines on neck.

Fig. 51 Unglazed wares (*kale*)

C2

- 40 CN4001 KP II S10 501.3
 RD 10 cm.
 Fairly coarse gritty buff ware (W5 - 5YR 6/4). Constricted neck flaring outwards then rising straight up to almond-shaped rim which thickens o. Oval handle from flare to body.
 Parallels: H21 1201.2 CP 2/3
 1201.3 CP 2/3
 L15 801.1 W1
 801.3
 802.1
 802.4
 Q10 E 1801.3
 R9 1401 3 ex. KP I/II
 R10 1302.10 KP I
 S9 1101.1 KP I/II?
 S10 501.3 2 ex. KP II
 S11 201.1 KP II

- 41 CN4003 KP I S10 501.16
RD 11 cm.
Fairly coarse buff ware with dark grey core (W5). Upright neck; round rim thickened o., ridge on neck o.
- 42 CN4089 KP I/II? R9 1403.1
RD 10 cm.
Orange ware with fairly fine grits (W5 - 5YR 6/6). Swelling body, elongated neck flares to ridge o. then upright to almond-shaped rim thickened o. Oval handle attached to ridge on neck and upper body. Vertical finger impression at base of handle, daubs of red paint on the body (not represented).
Parallels: L15 801.3
S11 201.1 3 ex. with red paint KP II
205.4 2 ex. KP I
- 43 CN4214 KP II R10 1301.3
RD 9 cm.
Gritty brown ware (W3). Fairly upright neck, flaring slightly to rounded thickened rim. Ridge on neck o. Painted red o. and over rim i.
Parallels: R9 1401.1 KP I/II?
- 44 CN4197 KP I/II R10 1302.3
RD 9 cm. S11 205.6 11 frags
Coarse buff ware (W5). Upright neck inclining slightly inwards. Simple round rim. Ledge on lower neck o.
Parallels: R9 1403.2 KP I/II?
S8 1502.1 2 ex. KP I?
S11 201.14 KP I
203.7 rim lost KP I
204.5 KP I
204.8 rim lost KP I
205.6 2 frags KP II
- 45 CN4131 KP II S10 501.13
RD 10 cm.
Coarse red ware (W3). Body slopes in to neck which inclines slightly to almond-shaped rim. Painted red o.
- 46 CN4004 KP I S10 501.18
RD 10 cm.
Fairly coarse buff ware with light grey core (W5). Wall inclining to almond-shaped rim. Ovaloid strap handle joins below rim.
Parallels: S10 501.3 KP II
501.9 KP I
- 47 CN4086 KP II S10 501.3
RD 9 cm.
Plain ware (W5). Upright neck, simple rounded rim.
Parallels: S10 501.4 KP II
503.1 KP I
S11 203.7 KP I
205.8 KP II
207.1 KP II
- 48 CN4105 KP II S10 501.4
RD 8 cm.
Coarse gritty pink brown ware (W5). Upright neck ridged o. below lip.
Parallels: H22 1604.2 CP 2
- 49 CN4087 KP II S10 501.3
RD 8 cm.
Plain ware, pinkish paste fired self colour (W5). Upright neck, rounded thickened rim with slight ridge below o.
- Fig. 52 Unglazed wares (*Kale*)
- C2
- 50 CN4217 KP II R9 1401.1
RD 18 cm., max D. 31 cm.
Gritty light brown ware, grey core in places (W3). Shallow bulbous lower body, ridge o. at max. girth. Body wall curves gently upwards to outward flaring neck with slightly thickened lip. Red paint o. extends over lip into neck. Decoration: incised wavy lines, small dashes and small applique discs.
Parallels: S11 203.3 KP II
- 51 CN4244 KP I R10 1301.5
RD 12.5 cm.
Putty coloured paste fired self (W5). Outward flaring neck, rim slightly concave to ridge i., rounded to ridge o. Brown paint on lip i. and o. and daubs on neck.
Parallels: Q10 E 1901.1 KP II
R10 1301.5 KP I
S11 205.3 KP II

- 52 CN4445 KP I S11 203.12
RD 12 cm.
Coarse grey gritty ware, firing pink at surfaces (W8). Upright neck with simple rounded flaring lip.
- 53 CN4345 KP I/II ? Q9 E 1704.1
RD 12 cm.
Gritty brown paste with white flecks and mica (W1). Outward flaring neck, rim thickened i. Squarish strap handle with 'kick' for thumb grip springs from below rim.
- 54 CN4136 KP I S10 501.14
RD 13 cm.
Coarse gritty buff ware (W2). Neck flares outward. Simple rounded rim. Ovaloid strap handle joins just below lip. Red paint i. and o.
Parallels: L16 801.2 no handle, W5, red paint o.
- 55 CN4148 KP I/II S9 1101.1
RD 15 cm.
Coarse gritty buff ware (W2). Flaring neck, simple rounded rim. Strap handle joins to lip.
Parallels: Q10 E 1801.11 KP I
R10 1302.10 KP I
S9 1101.1 KP I/II
1102.1 KP I/II

Fig. 53 Unglazed wares (Kale)

- C2
- 56 CN4357 KP I/II T9-11 2101.4
RD approx. 8 cm.
Brown medium fine ware, light o., darker i. (W3). Flaring neck above swelling globular body. Handle from shoulder to mid-neck. Filter i. at junction of neck and body. Grooves around neck. Moulded decoration of foliage.
NOTE: This is the only large fragment of a moulded vessel recovered from Tasgun Kale. See also sherds fig. 77, 228-230
- 57 CN4378 KP I/II? R11/R12 Baulk 2402.3
RD approx. 5 cm., max. D 14 cm.
Orange brown coarse ware (W4). Carinated body curving inward to long slightly flaring neck. Handle joins to body just above carination and mid-neck. Short spout joined to body just above carination. Thick slurry i., red paint o., criss-cross white paint lines around body o. and irregular white line around base of neck. Two grooves around mid-neck.
Parallels: S11 201.6 smaller; coarse orange ware, red paint o. KP I
- 58 CN4222 KP I R10 1301.8
RD approx. 8.5 cm., BD approx. 9.3 cm., max. D. 12.8 cm., H 20.7 cm.
Buff paste, fired self colour (W2). Flat base, bulbous body narrowing to neck which flares to lip, which has a slight outward kick. Trefoil mouth, mostly lost; ovaloid handle joined to upper body and just below lip; daubs of red paint on upper body and neck.
- 59 CN4446 KP II S11 203.17
BD 10 cm., max. D 12.5 cm.
Coarse ware, orange at surfaces, slipped and burnished vertically to a strong red o. (W4 - 10R 4/4-4/6), grey core. Flat bottom, globular body incurving to narrow neck. Strap handle. Rim lost. White painted design (tree?) mostly lost.

Fig. 54 Unglazed wares (Kale)

- C2
- 60 CN4433 KP I S11 203.7
RD 9 cm., BD 13.5 cm., max. D 19.7 cm., h 29 cm.
Coarse gritty micaceous brown ware (W3). Flat base, globular body, flaring neck, simple rounded rim, possibly trefoil. Handle from mid-neck to upper body. Red paint o.
- 61 No CN no. KP I S11 205.4
BD 8.3 cm., max. D 9.7 cm., H 15.7 cm.
Coarse gritty orange red ware (W37). Flat base, dumpy body, flaring neck, simple lip, trefoil mouth, oval handle, now lost, from rim to upper body. Red paint o.
Previously published: French et al. 1972: pl. 37, 10.
- 62 CN4106 KP II S10 501.4
RD approx. 5.5 cm.
Fine buff ware (W2). Upright neck, flaring slightly to rounded lip. Painted red on top of lip.
- 63 CN4002 KP I/II? S10 501.9
RD 8 cm.
Coarse plain ware (W5). Shoulder curving continuously into slightly flaring neck; simple rim. Handle, oblong in section from below lip to shoulder.
Parallels: H21 W 1207.7 smaller version.
Possibly pre-Medieval.

Fig. 56 Unglazed wares (*kale*)

- C3
- 64 CN4308 KP I RIO 1302.14
 RD 22 cm.
 Brown ware, white grits, fired brown, brown grey at core (W3). Swelling body, upright neck, rounded rim protruding to slight ridge externally. Incised wavy line between parallel straight lines at junction of neck and body.
 Parallels: S11 203.4 KP II
- 65 CN4091 KP I/II S10 503.1
 RD 24 cm.
 Coarse grey ware (W2). Neck upright, rounded rim slightly thickened.
 Parallels: S11 201.1)
 201.2) Possibly same vessel KP II
- 66 CN4264 KP I/II? Q9 E 1702.1
 RD 22 cm.
 Gritty brown ware (W3). Bulbous body curving in to neck with round slightly flared rim. Strap handle springs from lip and shoulder.
- 67 CN4251 KP I? S8 1502.1
 RD 17 cm.
 Brown ware fired self colour at surfaces, greyish core (W3 5YR 5/4). Swelling body, upright neck, rounded rim thickened o. Decorated with incised wavy and straight lines, dots and appliqué disc on shoulder. Small protuberance on o. edge of rim.
 Parallels: H21 W 1207.5 decoration on neck CP 2
- 68 CN4283 KP I RIO 1302.5
 RD 24 cm.
 Coarse brown ware, white grits (W3). Swelling body, upright neck, rounded rim thickened 1. and o. Incised wavy line between parallel straight ones on shoulder and traces of bands of red paint.

Fig. 56 Unglazed wares (*kale*)

- C3
- 69 CN4256 KP I/II? Q9 E 1701.1
 RD 22 cm.
 Gritty brown ware, white flecks (W3). Swelling body, upright neck, simple rounded rim. Strap handle from neck to body, finger impression at base.
 Parallels: K21 103.1 CP 2
- 70 CN4246 KP I RIO 1302.6
 D 22 cm.
 Gritty brown ware (W3 - 5YR 4-5/3). Bulbous body, upright neck, slightly outturned rim. Incised lines on body just below junction with neck.
 Parallels: H22 1601.6 CP 2/3
 Q10 E 1800.1 K cleaning
 1801.12 KP I
 R9 1404.1 KP I/II
 S11 202.11 KP I
- 71 CN4027 KP II S10 501.3
 RD 23 cm.
 Fairly coarse gritty brown ware (W3 - 5YR 5/4). Body tilts inward to slightly outward tilting neck. Rim is flat. Slashes diagonally at junction of neck and body.
 Parallels: J21 W 1003.1 CP 2
 S11 201.3 KP II
 204.2 KP I
- 72 CN4312 KP II? Q11 E 2201.1
 RD 14 cm.
 Coarse brown ware, white grits (W3). Upright neck, outflaring rim, swelling body. Handle springing from rim.
 Parallels: S11 201.4 KP II
 204.8 KP I
 207.1 2 ex. one with handle springing from neck KP I
- 73 CN4156 KP I S10 502.15
 RD 20 cm.
 Coarse brown ware, white grits (W3). Bulbous body, upright neck, flaring lip. Strap handle from lip to body. Diagonal slashes of varying length on neck, vertical slashes and appliqué disc on handle.
- 74 CN4101 KP II S10 501.4
 ED 23 cm.
 Coarse gritty pink brown past (W3). Upright neck, flaring rim with angle 1. Red paint 1. and o.
 Parallels: H21 1202.1 CP2/3
 RIO 1302.1 KP II
 S9 1102.1 KP I/II?
 1101.1 heavier KP I/II?
 S10 501.15 KP I
 S11 201.1 KP II

201.4 wavy incised line o. KP II
201.12 KP I

- 75 CN4185 KP I/II? R9 1401.1
RD 35 cm.
Coarse grey black ware (W1). Upright wall, thickening at internal angle of rounded lip. Brown paint o. and over lip i.
Parallels: L16 801.5 2 ex.
S11 200.4 K cleaning
- 76 No CN no. KP I S11 203.7
RD 20 cm.
Coarse black ware (W1). Inward sloping neck, lip slightly everted with angle i. Two incised wavy lines o. (NB Incised lines are not i., as shown on illustration).
- 77 CN4276 KP I? S8 1502.1
RD 20 cm.
Coarse brownish grey paste, white grits (W3). Bulbous body, upright neck, slightly curving out at rim. Incised wavy line between two parallel incised lines at junction of neck and body. Diagonal criss-crossing bands of matt red paint, fire-blackened.
Parallels: L16 802.2 with strap handle
S11 205.4 no paint KP I
207.1 undercoated, W1 KP II

Fig. 57 Unglazed wares (*kale*)

- C3
- 78 CN4020 KP II S10 501.3
RD 22 cm.
Coarse gritty micaceous reddish brown ware (W3). Swelling body, short upright neck, outward flaring rim bevelled i.
Previously published: McNicoll 1973a: fig. 14, 17
- 79 CN4395 KP I/II? Baulk 2406.1
RD 28 cm.
Coarse drab ware, blackened o. (W1). Swelling body, short upright neck, outward flaring rim bevelled i.
Parallels: J22 702.2 CP 2/3
L16 802.4
S11 201.3 KP II
- 80 CN4439 KP II S11 205.6
RD 16 cm.
Coarse gritty grey brown paste firing brown at surface i. and o. (W3). Bulbous body, short upright neck with simple square rim. Basket-type strap handle. Line of indented dots between two incised wavy lines. Matt red paint o. and over rim.
- 81 CN4432 KP I S11 203.7
RD 13 cm.
Coarse grey brown paste, firing brown at surface o. (W3). Swelling body curves in sharply to neck, which is upright, slightly outcurved. Square rim. Characteristic casserole shape to accommodate lid.
- 82 CN4022 KP II S10 501.3
RD 26 cm.
Coarse pink ware (W2). Upright neck, slightly inward sloping. Rim thickened on outside, flat on top. Red paint i.
Previously published: McNicoll 1973a: fig. 14, 1
- 83 No CN no. KP I S11 203.7
RD 12 cm.
Coarse black ware (W1). Swelling body, upright neck slightly outcurved, rounded rim.
Previously published: French et al. 1972: pl. 37, 15

Fig. 58 Unglazed wares (*kale*)

- C3
- 84 CN4247 KP I R10 1302.6
RD 21 cm.
Coarse drab paste fired self and blackened (W2). Gently incurving body, rim flaring slightly, bevelled i. Strap handle attached below neck and at maximum girth.
Parallels: H22 1602.2 CP 2
Q9 E 1701.1 KP I/II?
Q10 E 1801.3 KP II?
R10 1302.10 KP I
S8 1502.1 KP I?
- 85 CN4135 KP I S10 501.13
RD 17 cm.
Coarse gritty buff paste fired self (W2). Wall curves in to slightly flaring lip bevelled i. Small

horizontal oval impressions on upper body o.

Parallels: S8 1501.1 2 ex. KP II?
S11 203.7 KP I

- 86 CN4040(a) KP I S10 501.18
RD 20 cm.
Coarse, dark ware (W1). Wall inclining inwards; thickened lip bevelled i.
Parallels: L16 801.3
Q9 E 1703.1 KP I/II
R10 1301.7 KP I
R15 2001.1
S10 501.2 3 ex. KP II
501.3 3 ex. KP II
Previously published: McNicoll 1973a: fig. 14, 19
- 87 CN4032 R11 604.1
RD 21.5 cm.
Coarse drab ware (W2). Sharply incurving body, neck slopes in to thickened rim, bevelled i. Red paint o., two wavy incised lines on shoulder o.
Parallels: Q9 E 1702.1 3 ex. KP I/II
R10 1303.5 KP I
S10 501.3 KP II
S11 205.2 W1, unpainted KP II
205.7 possibly same vessel as type sherd KP I
Previously published (inaccurate angle): McNicoll 1973a: fig. 14, 11
- 88 CN4441 KP I S11 204.8
RD 17 cm.
Body curves in gently to short neck and flaring rim bevelled i. Red paint inside rim; splashes of red paint o.
- 89 CN4290 KP I/II? R9 1403.1
RD 19 cm.
Coarse gritty brown ware with white and micaceous specks (W3). Incurving body, roll rim bevelled internally.
Parallels: R9 1403.1 2 ex. KP I/II?
S11 201.1 KP II
- 90 CN4040(b) KP I/II? S9 1102.1
RD 20 cm.
Fairly coarse dark ware (W1). Thick inclining wall curving up to thickened lip with bevel internally.
- 91 CN4089 KP II S10 501.2
RD 24 cm.
Coarse reddish brown ware (W3). Thick inclining wall, everted rim bevelled i. Red paint i. and o.
- Fig. 59 Unglazed wares (Kale)*
- C4
- 92 CN4203 KP II R10 1302.1
RD 27 cm.
Gritty grey ware, white and micaceous speckles fired self colour (W1). Wall curving steeply upwards to simple rim bevelled i. Red paint o. and i. 3 cm. over rim.
- 93 CN4093 KP I S10 503.1
RD 21 cm.
Coarse brown ware (W3). Wall inclining inward to simple lip bevelled i.
Parallels: S10 501.5
- 94 cf CN4092 KP II R10 1303.1
RD 20 cm.
Coarse ware fired brown red at surfaces (W3). Fire-blackened o. Inward curving walls, short neck rising to simple rim, bevelled i.
Parallels: H21 1201.3 CP 2/3
L16 801.1
802.2
801.4 W1, slashed incisions on shoulder
R10 1301.5 KP I
1301.9 KP I
1303.1 KP II
1303.3 2 ex. KP I
S11 202.4 KP II
204.9 KP I
- 95 CN4092 KP I? S10 503.1
D 24 cm.
Coarse brown ware (W3). Short insloping neck, slight bevel on simple rim i.

- 96 CN4008
RD 14 cm. N^o II S10 501.3
Fairly fine buff ware (W₀). Incurving body, rim thickened o., flat on top. Red paint o.
Parallels: S10 501.4 2 ex. KP II
Previously published: McNicoll 1973a: fig. 13, 8
- 97 CN4225
RD 13 cm. K cleaning R9 1400.1
Gritty dark ware, fired and burnt black (W1). Wall curves in to upright rim, bevelled i.
Parallels: S11 201.4 KP II
204.7 KP I

Fig. 60 Unglazed wares (*kale*)

C4

- 98 CN4253
RD 15 cm., est. H 17 cm. KP I? S8 1502.1
Grey buff ware (W2). Globular body, ridged on shoulder o., simple upright rim. Strap handle joined horizontally at ridge on shoulder.
Parallels: S11 202.4 11 frags of some pot KP II
205.6 KP II
205.7 larger version KP I
205.8 KP II
- 99 CN4120
CN4146 KP I/II? S10 501.8
Coarse grey buff ware (W2). Shape as fig. 60, 98, but wall curves in to base more sharply. S9 1101.1
Parallels: L16 801.1
Q9 E 1701.1 ridge decorated with small slashes KP I/II?
Q10 E 1801.3 slightly larger KP II
R10 1301.10 KP I
1302.5 ridge decorated with small diagonal slashes KP I
1303.2 KP I
R15 2001.1 2 ex.
S8 1502.1 KP I?
S11 205.6 KP II

- 100 CN4029
RD 21 cm. KP II S10 501.4
Fairly coarse micaceous red ware (W3), exterior fire-blackened. Wall curving gradually inwards to upright slightly thickened, rounded rim. Ridge on shoulder o. Red painted criss-cross pattern o.
Previously published: McNicoll 1973a: fig. 14, 8
- 101 CN4031
RD 14 cm. KP I/II? S10 501.8
Coarse gritty brown ware (W3), exterior fire-blackened. Shape similar to fig. 60, 99, but thicker wall.
Previously published: McNicoll 1973a: fig. 14, 10
- 102 CN4285
RD 22 cm. KP I R10 1302.5
Light brown ware (W3). Swelling body wall with ridge on shoulder o., short upright neck, thickened rim, rounded o., bevelled. Red paint i. and o., very light incised wavy line below ridge.
Parallels: Q10 E 1801.2 KP II

Fig. 61 Unglazed wares (*kale*)

C3

- 103 CN4028
RD 28 cm. KP II S10 501.4
S11 205.2
205.6
Rather coarse micaceous pink ware (W2). Steeply rising wall, incurving slightly to simple everted lip. Vertical thumb or finger impression on body o., incised wavy and straight lines o. Red paint o.
Parallels: S10 501.2 KP II
501.3 KP II
S11 203.4 no red paint or incisions KP II
Previously published: McNicoll 1973a: fig. 14, 7
- 104 CN4255
RD 32 cm. KP I? R10 1301.9
Brown gritty paste reduced black i. and in patches o. (W3). Wall rising with slight inward slope to simple rounded rim.
- 105 CN4322
RD 24 cm. K cleaning Q10 E 1800.1
Coarse brown paste with white grits, fired brown and black (W3). Upright wall, rim flaring slightly o., concave to thickened ridge i.
Parallels: S11 204.6 smaller ex. KP I

- 106 CN4026 KP II S10 501.3
RD 22 cm.
Fairly coarse grey brown ware firing red at surfaces (W3). Wall inclines inwards to thickened rim protruding i.
Previously published: McNicoll 1973a: fig. 14, 5
- 107 CN4284 KP I R10 1302.5
Max. D 31 cm.
Coarse brown ware with white grits (W3). Globular body, rim missing. Strap handle from neck to moulded ridge on body at point of maximum girth. Decorated with applique blobs of pottery with impressed dot centres, and with impressed dots and gashes. Painted red o. and irregularly for some distance down the vessel.
Parallels: Q10 E 1801 KP II
- Fig. 62 Unglazed wares (*kale*)
- 02
- 108 CN4307 KP I R10 1302.14
RD 30 cm.
Medium coarse light brown ware, fired self colour at surfaces, darker at core (W2 - surface 5YR 6/4). Incurving wall, simple rounded rim. Heavy matt red paint i. and o.
Parallels: Q11 E 2201.1 KP II?
S11 201.2 KP II
201.2 KP II
201.4 2 ex. KP II
201.3
203.7 KP I
204.8 KP I
205.2 KP II
- 109 CN4499 KP II S11 203.3
RD 18 cm.
Medium coarse orange ware with some small grits (W2 - 5YR 5/4-6/4). Wall curves out to carination, then in to simple rounded rim. Matt red paint o., and on upper surface i.
- 110 CN4319 KP I Q10 E 1801.11
RD 18 cm.
Medium coarse orange buff ware with white specks (W2 - 5YR 7/4). Wall curves out to slight carination, then in to simple rounded rim. Brown orange paint i. and over rim to carination.
Parallels: L16 801.1
803.3
S11 201.1 KP II
- 111 CN4213 KP I/II? R9 1403.1
RD 22 cm.
Coarse pink buff ware (W2 - 5YR 7/6). Curving wall to simple rounded rim. Matt red paint i. and o.
- 112 CN4015 KP I R11 604.1
RD 10 cm.
Coarse micaceous brownish ware firing self colour (W2 - 7.5YR 5/4-6/4). Rounded shape incurving to round rim. Matt red paint i. and o.
Parallels: R10 1302.4 buff ware KP I
S11 201.2 red paint o. only KP II
- 113 CN4437 KP I S11 204.7
RD 22 cm.
Coarse gritty buff pink ware (W2 - 5YR 7/4-8/3). Thick carinated body, upper wall sloping in slightly to flat-topped rim with slight thickening o. Matt red paint i. and o., crude diagonal white painted lines o.
- 114 CN4118 KP II R10 1302.2
RD 25.5 cm.
Coarse gritty orange ware (W2 - 5YR 6/6). Curving wall, slight carination. Slightly outturned rim, bevelled i. Matt red paint i. and o., three incised wavy lines on upper body o.
Parallels: H21 1203.2 CP 2/3
R9 1401.1 no incised decoration KP I/II?
R10 1302.4 KP I
- 115 CN4096 KP I S10 501.13
RD 26 cm.
Coarse gritty grey brown ware (W3 - 5YR 4/4). Inward-sloping upper wall, rim slightly thickened and bevelled i. Matt red paint i. and o., incised wavy lines o.
Parallels: R10 1301.5 KP I
1302.3 KP I
S9 1101.2 3 ex. KP I/II?
- 116 CN4424 KP II S11 201.4
RD 16 cm.
Close pinkish ware, firing red at surfaces (W3 - 2.5YR 5/4). Curving body, slight shoulder, rim bevelled i. Burnished o.

- 117 CN440 RD 16 cm. KP I/II? T9-11 2101.7
 Coarse dark ware with white grits (W3 - 5YR 5/4). Curved body, upper wall sloping in to rounded rim thickened o., and slightly bevelled i.
- 118 CN442 RD 15 cm. KP II S11 202.7
 Medium course pink ware (W2 - 5YR 6/6). Upper wall curves in to rounded rim, slightly thickened o.

Fig. 63 Unglazed wares (knle)

- 02
- 119 CN4288a RD 14 cm. KP I/II? R9 1104.1
 Brown ware with white grits (W3 - 5YR 5/4). Curving wall with slightly outflaring rim bevelled i. Handle oval in section, joins at rim and at maximum girth. Matt red paint i. and o.
- 120 CN4083 D 30 cm. KP I/II? S10 501.9
 Light buff ware, fired self colour (W2 - 5YR 6/4-7/4). Curving wall, rim bevelled i. Horizontal grooves on upper body o. Matt dark buff paint o. and over rim.
 Parallels: H21 1201.3 CP 2/3
 J21 W1003.1 coarser ware CP 2
 R9 1104.1 KP I/II?
 R10 1301.2 KP II
 1301.3 3 ex. red paint
 1301.7 red paint KP I
 1301.10 KP I
 1302.10 slightly larger KP I
 S9 1101.1 2 ex. KP I/III?
 S10 501.3 2 ex. KP II
 501.6 KP I
 S11 200.3 no paint K cleaning
 201.3 KP II
 201.16 red paint KP I
 205.2 red paint KP II
 205.6 coarse ware KP II
 205.8 KP II
 207.2 KP I

All examples painted similarly to type sherd unless stated otherwise.

- 121 CN4154 KP I/II? S9 1101.2
 RD 19 cm.
 Buff ware (W2 5YR 6/4). Curving wall, bevelled rim. Horizontal grooves on body o., matt red paint o. and i. over lip.
 Parallels: K21 103.1 slightly straighter wall CP 2
 Q10 E 1801.2 KP II
 R9 1401.1 very coarse ware KP I/II?
 R10 1300.5 K cleaning
 S11 201.2 coarse ware KP II
- 122 CN4082 KP II S10 501.3
 RD 18 cm.
 Buff ware (W2 5YR 7/4). Slightly insloping wall, lip bevelled i. Horizontal groove o., matt red paint i. and o.
 Parallels: S11 201.1 thicker wall KP II
- 123 CN4012 KP I R11 604.1
 RD 18 cm
 Critty pinkish grey micaceous ware (W2 7.5YR 6/2). Curving wall, bevelled rim. Two horizontal grooves o., matt red paint o. and over lip i.
 Parallels: H21 W 1207.4
 S10 501.4
 501.14
 S11 205.6
 Previously published: McNicoll 1973a: fig. 13, 12
- 124 CN4140 KP I/II? S9 1101.1
 RD 26 cm.
 Coarse pink grey ware. Curved body, carinated, bevelled rim. Painted with matt red paint i. and o., blackened lower wall o.
 Parallels: L16 801.1
 R9 1401.1 shorter wall KP I/II?
 R10 1302.6 more rounded lip KP I
 1303.2 carination pronounced KP I
- 125 CN4327 KP I Q10 E 1801.6
 RD 22 cm.
 Medium coarse brown ware fired self colour (W3 - 5YR 5/4; below carination 5YR 4/1-5YR 3/1). Curving body, carinated; insloping wall above thickened bevelled rim i. Red paint o. and over rim i.
 Parallels: S11 201.2 2 ex. KP II
 205.6 KP II

Fig. 64 Unglazed wares (*kale*)

02			
126	CN440 RD 30 cm. Coarse buff ware, micaceous (W2 - 5YR 6/4). Curving wall, rounded rim thickened o. Parallels: S11 201.3 smaller KP II 201.4 smaller KP II	KP I/II?	S10 501.8
127	No CN no. RD 14 cm. Coarse gritty buff ware (W2). Red painted rim i. and o. Flat base, curving wall, rounded rim thickened o., ledge handle(s). Previously published: French et al. 1972: 60, pl. 37, 11	KP I	S11 202.8
128	cf. CN4013 RD 35 cm. Fairly fine pink ware (W7 5YR 6/4). Curving wall, rounded rim thickened o.	KP I	R11 604.1
129	CN432 RD 19 cm. Fine light brown ware (W7 5YR 7/4). Painted darker brown i. and to shoulder o. with white blobs on rim externally. Curving wall, rim thickened o. Parallels: S11 201.4 red paint KP II 205.3 KP II	KP I/II?	T9-11 2101.2
130	CN4011 RD 20 cm. Fairly fine orange ware (W7 - 5YR 7/6). Red paint i. and o. Curving wall, upright rim thickened o. Previously published: McNicoll 1973a: fig. 13, 11	KP I	R11 602.4 S11 205.9
131	CN4013 RD 22 cm. Fairly fine brown and pink ware (W7 5YR 6/4). Painted red i. and o., curving wall, rim thickened externally to ridge. Parallels: S11 205.7 2 ex. with red paint KP I 205.2) 205.3) red paint KP II 205.6) 205.8) brown paint KP II Previously published: McNicoll 1973a: fig. 13, 13	KP I	R11 604.1
132	CN4009 RD 14 cm. Fairly fine pink ware (W7 - 5YR 7/4). Painted red i. and o. Curving wall i. rim thickened o. Parallels: R9 1401.1 2 ex. KP I/II?	KP I/II?	S10 501.8
133	CN4014 RD 28 cm. Coarse gritty ware (W2). Thick curving wall, plain upright rim, slight grooves on body o. Previously published: McNicoll 1973a: fig. 13, 14	KP I	R11 604.1
134	CN4417 RD 16 cm. Harsh buff orange ware (W2 5YR 7/4). Traces of red paint i. and o. Curving wall, slight carination, upright rounded rim, two grooves on body o.	KP II	S11 201.1

Fig. 65 Unglazed wares (*kale*)

02			
135	CN4431 RD 18 cm. Close orange ware (W2 - 5YR 6/4). Red paint i. and o. Fairly thin wall slightly curving to simple rounded rim.	KP I	S11 203.7
136	No CN no. RD 20 cm. Coarse ware, black core, red at surfaces. Wall slopes out, rim thins i., bulger o. Compare glazed frag. profile McNicoll 1973a: fig. 12, 6 Previously published: McNicoll 1973a: fig. 14, 18	KP I	S10 501.18
137	CN4328 RD 24 cm. Medium coarse ware with white grits fired red (W2 5YR 6/4). Red paint over rim i. and o. Upright wall, outturned protruding rim, slightly concave on top.	KP	Q10 1801.6
138	CN4085 RD 16 cm. Plain micaceous ware fired pinky buff (W2 - 5YR 7/4). Brown paint o., red i. Curved wall, lip pointed at exterior. Heavy ridge at shoulder o.	KP I	S10 503.1

- Parallels: S10 501.3 rim tip upright KP I/II?
S11 501.1 tiny frag. KP II
- 139 CN4187 K cleaning R10 1300.1
RD 18 cm.
Very coarse gritty ware fired grey black (W8 - 5YR 4/2 - 5YR 7/4). Curving wall, carinated o., pronounced wheel marks i.
Parallels: L16 801.1 smaller, W2
Q10 E 1801.2 red paint i. and o. KP II
R10 1301.7 red paint i. and o. KP I
1303.6 red paint i. and o. KP I
S10 501.3 KP II
R15 2001.1 red paint i. and o.
- 140 CN4099 KP II S10 501.4
RD 16 cm.
Gritty ware fired red grey (W2 - 5YR 5/2-5/3-6/3). Red paint on handle, o. and over rim. Flat bottom, wall curves up to rounded rim. Strap handle.
Parallels: Q10 E 1801.7 smaller KP I
S11 205.4 KP I
205.6 KP II
- 141 CN4196 KP I R10 1302.3
RD 19 cm.
Coarse ware, fired buff (W2 - 7.5YR 7/4). Upper o. painted brown, sporadic brown paint i.
Parallels: L16 801.4
Q10 E 1801.3 3 grooves KP II
- 142 CN4184 KP I/II? R9 1401.1
RD 28 cm.
Gritty drab ware with white and micaceous flecks (W2). Red paint i. and o. Upright wall, slight thickening o. to form ridge, rounded rim.
Parallels: Q10 E 1801.6 4 grooves o. KP I
R10 1302.5 KP I
S11 205.6 KP II
- 143 CN4155 KP I/II? S9 1101.2
RD 20 cm.
Grey buff ware (W8). Red paint i. and o. Upright wall, slightly incurved, rounded rim with slight concavity o.
Parallels: L16 801.2
802.2
R9 1401.1 KP I/II?
R10 1301.5 2 ex. KP I
S9 1101.2 2 ex. KP I/II?
S11 205.4 KP I
- 144 CN4426 KP II S11 201.5
RD 18 cm.
Coarse gritty pinkish ware (W3 - 5YR 4/4). Red paint i. and o. Simple upright wall, rounded rim. Appliqué decoration (handle?) o.
- 145 CN4440 KP II S11 205.8
RD 13 cm.
Harsh gritty buff ware (W2). Red paint on rim and below rim o. Upright wall, rounded rim thickened o. Groove on body o.
- 146 CN4111 KP I S10 501.5
RD 15 cm.
Gritty grey pink ware (W2 5YR 7/4). Red paint i. and o. Curving wall to squarish rim with a groove on top, and another just below rim o.
Parallels: R10 1301.10 KP I
- Fig. 68 Unglazed wares (*knle*)
- 03
- 147 CN4100 KP II S10 501.4
RD 48 cm.
Pinky grey coarse ware (W2). Red paint i. and o. Wall leaning outwards, thickened rim with slight overhang o., and angle at junction of lip wall i.
Parallels: R9 1401.1 KP II?
S10 501.4 KP II
S11 201.3 KP I
205.6 2 ex. KP II
205.10 KP I
- 148 CN4423 KP II S11 201.4
RD 48 cm.
Coarse gritty drab orange ware (W2). Red paint i. and on rim o. Wall curving internally, angular rim thickened i. and o. with slight overhang o.

- 149 CN4041 KP I R11 604.1
 RD 36 cm.
 Coarse gritty red ware (W1). Red paint i. and over rim o. Wall curving internally, rim thickened i. and o. with angle at junction of lip and wall i. and overhang o.
 Parallels: H22 1604.4 unpainted CP 2
 Q9 E 1704.1 KP I/II?
 S9 1101.1 KP I/II?
 S11 201.2 KP II
 Previously published: McNicoll 1973a: 178, fig. 14, 20, with wrong angle.
- 150 CN4081 KP I S10 503.1
 RD 26 cm.
 Coarse gritty, micaceous ware fired buff pink (W2). Traces of red paint on rim. Curved wall, thickened rim bevelled i. and o. to rounded lip. Swelling of handle, broken off.
 Parallels: H21 1302.2 heavier CP 2
 R10 1301.3 KP II
 1302.2 lighter KP II
 1303.2 2 ex. KP I
 S11 205.6 2 ex. KP II
- 151 CN4224 K cleaning R9 1400.1
 RD 36 cm.
 Gritty brown ware with white flecks (W3). Curving wall, rim flaring slightly outwards.
 Parallels: R10 1302.10 cruder KP I
 S11 201.4 KP II
- 152 CN4219 KP I/II? R9 1402.1
 RD 36 cm.
 Light brown gritty ware, fired brown o., grey i. (W3). Red paint on inner rim. Outward curving wall, slightly flaring rim, rounded lip. External ridge.
- 153 CN4109 KP II S10 501.4
 RD 30 cm.
 Coarse gritty pink grey ware (W2), Red paint i. and on top of rim. Outward curving wall, thickened at junction of wall and lip i., squarish rim, slight concavity below rim o.
 Parallels: S9 1101.2 KP I/II
 S11 202.11 smaller KP I
 205.6 KP II
 207.2 KP I
- 154 CN4107 KP II S10 501.4
 RD 36 cm.
 Coarse gritty buff ware, grey core (W2). Wall leaning outwards, internal ridge at rim, concavity below lip o., rim bevelled o.
- 155 CN4299 KP I R10 1301.14
 RD 39 cm.
 Light brown ware with white grits (W3). Red paint on rim i. and o. Outward sloping wall, rim bevelled externally with internal ridge at lip and wall junction.
- Fig. 67 Unglazed wares (Kale)*
- 03
- 156 CN4438 KP II S11 205.6
 RD 35 cm.
 Coarse gritty ware, firing pink o., brown i., grey at rim (W8). Wall curving up to thickened rim.
 Parallels: L16 801.1
- 157 CN4080 KP II S10 501.2
 RD 35 cm.
 Coarse red ware (W2). Red paint i. and over lip. Wall curving up to thickened rim.
 Parallels: R15 2001.1 with 'piecrust' on outer rim
- 158 CN4147 KP I/II S9 1101.1
 RD 34 cm.
 Coarse gritty brown ware (W3). Wall curving up to thickened rim.
 Parallels: R10 1301.1 KP II
 S11 201.1 KP II
- 159 CN4273 KP I R10 1302.10
 RD 32 cm.
 Brown coarse ware (W3). Walls curve up to rim, thickened o. Slight ridge below rim o.
 Parallels: H22 1602.8 2 ex. CP 2
 K22 103.1 grittier fabric CP 2
 S11 202.12 W1 KP II
 204.5 W1 KP I
- 160 CN4418 KP II S11 201.1
 RD 30 cm.
 Coarse grey ware firing blotchy black and light brown o., grey brown i. (W8). Upright wall, rounded

- rim thickened o., broad shallow groove under lip o.
 Parallels: S11 207.2 KP I
- 161 CN4415 KP II S11 201.1
 RD 40 cm.
 Very coarse gritty brown ware, black core. Wall curving upwards to rim thickened o. Crude incised meander decoration on top of rim. Four (?) knob handles. Not wheeled.
- 162 CN4291 KP I/II? R9 1103.1
 RD 44 cm.
 Coarse red ware with white grits. Red paint i. and over rim. Wall angled steeply outwards, rim flaring o., ridge at junction of lip and wall i.
 Parallels: L16 801.1 red paint i., meander on rim
 Q9 E 1704.1 2 ex. red paint i. KP I/II?
- 163 CN4055 KP II S10 501.4
 RD 40 cm.
 Fairly coarse red ware (W2). Wall steeply angled outwards, squarish rim flaring o., slightly concave on top.
 Previously published: McNicoll 1973a: fig. 15, 3
- 164 CN4068 KP I R11 603.2
 RD 36 cm.
 Coarse gritty dark ware (W1). Wall curving up to rim thickened o. Indentations with blunt point in rim o.
 Previously published: McNicoll 1973a: fig. 15, 16
- 165 CN4061 KP I S10 503.1
 RD 28 cm.
 Red brown ware (W8). Red paint i. and o. Wall curves up to rim flaring o. with slight groove below lip.
 Previously published: McNicoll 1973a: fig. 15, 9
- Fig. 68 Unglazed wares (kale)*
- 03
- 166 CN4069 KP I R11 604.1
 RD 48 cm.
 Coarse gritty ware (W2). Upright wall, rounded, slightly outturned rim. Ledge handles.
 Previously published: McNicoll 1973a: fig. 15, 17
- 167 CN4183 KPI/II? R9 1401.1
 RD 35 cm.
 Coarse gritty paste, fired grey o., red i. Wall slopes out to squarish rim.
 Parallels: H21 1302.13 CP 2
 R10 1301.1 KP II
 1302.10 KP I
 1303.3 KP I
 R12 1903.2 KP I
- 168 CN4084 KP II S10 501.3
 RD 36 cm.
 Coarse gritty ware (W2). Wall slopes out to thickened squarish rim. Impressed roundels below rim o.
 Parallels: Q9 E 1704.1 2 ex. one with red paint KP I/II?
 R10 1301.1 KP II
 1302.1 KP II
 1302.6 KP I
 1303.2 red paint i. and over rim KP I
 S11 201.1 2 ex. KP II
 201.6 KP I
 205.2 KP II
 R15 2001.1
- 169 CN4023 KP II S10 501.3
 RD 28 cm.
 Rather coarse gritty ware, dark core, pink surfaces (W2). Slightly curving wall rising to rounded rim, bevelled i.
 Previously published: McNicoll 1973a: fig. 14, 2
- 170 CN4065 KP I R11 602.2
 RD 32 cm.
 Coarse ware with straw temper, black core, buff surfaces (W8). Straight outward-sloping wall, ledge handle.
 Previously published: McNicoll 1973a: fig. 15, 13
- 171 CN4306 KP II Q10 E 1801.1
 RD 35 cm.
 Coarse brown ware with white grits (W3). Slightly curving oblique wall, rim bevelled i., applied 'picrust' moulding below rim o.

- 172 CN4266 KP I/III? Q9 E 1702.1
RD 37 cm.
Coarse grey ware (W1). Wall curving to simple upright rim bevelled i. Two bands of zig-zags impressed with a sharp edged tool between rim and ridge o.
- 173 CN4218 KP II R10 1302.4
RD 28 cm.
Orange gritty ware with white specks and mica (W3). Round, folded, upright rim only
- Fig. 69 Unglazed wares (*Kale*)
- 03
- 174 CN4344 KP I/III? Q9 E 1704.1
RD 14 cm.
Very coarse brown ware with white grits (W3). Incurving wall, round rim slightly flattened.
- 175 CN4444 KP I S11 204.10
RD 46 cm.
Coarse gritty ware, fired brown, grey, black and red (W8). Slightly insloping wall, squarish rim with ledge 1.
- 176 CN4355 KP I/II T9-11 2101.6
RD 59 cm.
Coarse gritty ware, grey core, light brown surfaces (W2). Red paint i. and over rim. Flat bottom, curved outward inclining wall. Round flattened rim protruding o. Four lug handles. Scale 1:6
Parallels: L16 801.5 smaller
S11 202.9 smaller KP I
205.6 2 ex. KP II
- 177 CN4303 KP II Q10 E 1801.1
RD 45 cm.
Fairly coarse ware, pale grey core, buff surfaces (W2). Slightly curved outward-inclining wall. Rounded rim, thickened o. Lug handle (one of four?) with vertical depression. Scale 1:6
- 178 CN4254 KP I/II R10 1301.9
RD 51 cm. S11 205.3
Coarse gritty ware fired red, pink and grey (W8). Outward sloping wall, rounded rim thickened o., flat base. Four lug handles. Hand-moulded. Scale 1:6.
Parallels: Q10 E 1801.3 KP II
- Fig. 70 Unglazed wares (*Kale*)
- 01 and 04
- 179 CN4326 KP I Q10 E 1805.2
D 24 cm.
Medium coarse ware with white grits and mica flecks, fired buff (W2). Red paint i. and over rim; cream paint on top of rim. Steeply outslipping wall, outturned squarish rim.
- 180 CN4320 KP I/II Q10 E 1801.11
RD 24 cm. S11 203.3
Medium coarse ware with white flecks, fired light brown at surfaces, brown grey core (W2 - surfaces 7.5YR 6/4, core 7.5YR N6). Brown paint i. and over rim. Steeply outslipping wall, flat outturned rim with rounded lip. Criss-cross incisions on top of rim.
Parallels: S11 203.3 KP II
- 181 CN4143 KP I/III? S9 1101.1
RD 26-36 cm.
Coarse gritty pinky buff ware (W2). Flat bottom, curved wall to rounded rim. Hand-moulded.
Parallels: R9 1401.1 KP I/III?
- 182 CN4245 KP I R10 1301.5
RD 26 cm.
Coarse gritty light brown ware (W2), blackened by fire on base and sides o. Painted red i. and on top of rim. Flat base, stubby wall, round rim with 'pie crust' gashes on top.
- 183 CN4309 KP I R10 1302.14
RD 26 cm.
Coarse ware, fired drab (W2). Flat base, stubby wall slightly concave o., round rim.
- 184 CN4311 KP I/III? Q11 E 2201.1
RD 20 cm.
Medium coarse pink grey ware (W2 - 5YR 7/6). Red paint i. and o. Flat bottom, slightly outslipping wall tapering to rounded rim. Two incised wavy lines o.
Parallels: S11 200.5 rim only K cleaning
204.7 KP I
- 185 CN4422 KP II S11 201.3
RD 20 cm.
Very coarse gritty orange ware (W2). Thick flat base, low, stubby, slightly outslipping wall, squarish rim. O. profile of wall concave.

Fig. 71 Unglazed wares (KaLe)

XI

- 186 CN4141 KP I/II S9 1101.1
 RD 27 cm.
 Coarse drab ware (W1). Flat, slightly upturned at edge which is slightly indented.
 Parallels: L16 801.4
 Q10 E 1801.3 KP II
 R10 1301.2 KP II
 1302.1 KP II
 S10 503.1 2 ex. KP I
 S11 201.1 2 ex. KP II
 201.3 KP II
 205.4 KP I
 207.1 KP II
- 187 CN4188 KP I/II? R9 1401.1
 RD 23.5 cm.
 Gritty brown ware, black core (W3). Flat, indented edge. 'Pie crust' indentations on upper rim, wheel-made ridges in upper surface, one with indentations.
- 188 CN4278 KP I R10 1303.2
 RD 23 cm.
 Coarse orange ware, grey and brown core (W2). Flat, indented edge. 'Pie crust' indentations on upper rim. Handle from edge to near centre.
 Parallels: Q10 E 1801.3 no 'pie crust' KP II
 S11 201.4 no 'pie crust' KP II
- 189 CN4351 KP I/II T9-11 2101.7
 RD 22 cm.
 Coarse purple grey ware with white grits and mica flecks (W3). Fairly flat, with conical dome pierced with steam-vents in centre; squarish, slightly upturned edge, small 'pie crust' indentations on upper edge.
 Parallels: S11 201.5 edge only - no 'pie crust' KP II
- 190 CN4189 KP I/II? R9 1401.1
 D 25 cm.
 Gritty buff pink ware, black core (W2). Flat, two-faceted edge, 'pie crust' decoration on upper rim.
 Parallels: L16 801.5
 802.2 with red paint on upper surface and over rim
 Q9 E 1704.1 KP I/II?
 R10 1301.10 KP I
 1302.10 KP I
 1303.3 KP I
- 191 CN4114 KP I S10 501.6
 RD 25 cm.
 Coarse gritty drab ware (W1). Flat, overhanging rounded rim, slashes in upper edge.
 Parallels: L1y 801.3
 Q10 E 1805.1 KP I
 S10 501.8 no decoration KP I/II?
 S11 203.7 thinner KP I
- 192 CN4142 KP I/II S9 1101.1
 RD 20 cm.
 Coarse gritty drab ware (W1), red paint on top. Flat, upturned at edge. Edge leans out slightly. Handle springs from top close to edge.
 Parallels: H22 1604.2 central handle CP 2
 S11 204.10 meander at edge and red paint KP I
- 193 CN4190 KP I/II? R9 1401.1
 RD 25.5 cm.
 Gritty ware fired black and grey (W1). Red paint on top. Flat, upper edge pinched up, and decorated with row of incised dots. Rim leans out slightly.
 Parallels: S11 201.1 no incisions KP II

Fig. 72 Unglazed wares (KaLe)

XI

- 194 CN4216 KP I/II? R9 1401.1
 RF 18 cm.
 Gritty ware, fired black and brown (W1). Flat edge tilted up. Central, roughly rectangular knob. Rim irregular.
 Parallels: L16 802.1 thicker, with 'pie crust' around rim.
- 195 CN4275 KP I R10 1301.7
 RD 26 cm.
 Coarse ware, fired brown above, black below, core and handle (W1). Thick and flat, rounded rim, central knob with vertical hole in centre. Indentations in upper rim and around knob.

- Parallels: L16 800.2 knob lost
 801.6 knob lost
 S11 205.2 knob lost KP II
- 196 CN4201 KP II R10 1302.1
 RD 24 cm.
 Coarse drab ware (W1). Rising slightly to centre, rounded rim, strap handle attached near rim. Indented roundels around upper rim.
 Parallels: S11 202.8 no trace of handle KP I
 205.2 KP II
- 197 CN4201 KP I S11 202.8
 D 32 cm.
 Coarse gritty ware, dark core, light brown at surfaces (W8). Flat, rounded edge. Impressed 'tracks' on upper surface, slashes on rim.
- 198 CN4115 KP I/II? S10 501.8
 RD 21 cm.
 Coarse gritty pink ware (W1). Rising toward centre, ridged upper surface, rounded rim.
 Parallels: S10 501.8 KP I/II?
- 199 CN4272 KP I R10 1302.10
 RD 24 cm.
 Coarse ware fired red on lower surface, black and brown above (W8). Rising toward centre, ridged upper surface, small upturned rim. Strap handle joins surface 3 cm. from rim.
- 200 CN4122 KP I/II? S10 501.8
 RD 30 cm.
 Coarse pink ware (W2). Rising slightly toward centre, rounded rim. Two parallel incised lines in upper surface by rim.
- 201 CN4252 KP I S8 1502.1
 RD 28 cm.
 Very coarse grey brown ware (W1). Thick, flat, with slightly upturned rounded edges. No trace of handle(s) on surviving portion (more than half the original utensil). Could be 04.
- Fig. 73 Unglazed wares (kale)*
- XI
- 202 CN4097 KP II S10 501.4
 RD 24 cm. S11 206.1
 Coarse ware, fired black at surfaces, red core (W8). Flat, rounded oblique edge, central knob.
- 203 CN4103 S10 501.4
 RD 14.5 cm.
 Coarse pink and grey ware (W8). Flat rim, slightly rounded oblique rim grooved above, 'pie crust' decoration around rim. Strap handle.
 Parallels: H21 1201.4 heavier CP 2/3
- 204 CN4427 KP I S11 201.6
 RD 18 cm.
 Orange coarse gritty ware (W2). Thin lid with rounded oblique rim. 'Pie crust' decoration around rim and round indentations.
- 205 CN4421 KP II S11 201.3
 RD 26 cm.
 Coarse gritty black ware firing dark brown at surfaces (W1). Red paint on top. Simple flat lid, edge rounded and sloping in slightly, finger (?) indentations on top.
 Parallels: L16 801.3
- 206 CN4113 KP I S10 501.6
 RD 24 cm.
 Coarse gritty drab ware (W2). Painted red on top and over rim. Flat lid, squarish rim, groove on top.
 Parallels: H21 1201.4 CP 2/3
 S10 501.8 KP I/II?
- 207 CN4191 KP II R10 1301.2
 RD 28 cm.
 Coarse drab ware (W2). Flat bottom bevelled up to short vertical rim. Concentric ridges above. Indentations on upper edge of rim.
 Parallels: L16 801.2 thinner, no indentations
 S11 201.1 massive KP II

Fig. 74 Unglazed wares (kale)

XI

- 208 CN4490a KP I S11 201.7
 RD 30 cm.
 Coarse gritty ware, grey core, brown surfaces (W1). Very thick lid, squarish rim with projection

outwards at bottom edge and upwards at upper edge.
 Parallels: S11 207.1 thinner KP II

- 209 CN4243 KP II S8 1501.1
 RD 39 cm.
 Very coarse gritty brown ware, white flecks, grey core, blackened surface (W3). Flat lid, square rim. Strap handle ribs vertically from rim, curving over and running obliquely to centre. Pressed down at centre with thumb. Decorated with small pushes on upper edge of rim, and three appliqué horse shoes on handle. Gashes at base of handle.
- 210 CN4088 KP I S10 501.3
 RD 23 cm.
 Coarse micaceous red ware, grey at core. Flat lid, squarish rim, concentric raised ridges on upper surface.
 Parallels: H21 1202.14 CP 2
 J21 W1003.1 CP 2
 L16 801.10
 R9 1403.2 KP I/II?
 R10 1301.1 KP II
 1301.2 KP II
 1302.1 2 ex. KP II
 1302.4 KP I
 1302.14 KP I
 1303.3 KP I
 R12 1904.1 KP I
 S10 501.4 KP II
 501.8 KP I/II?
 S11 201.2 'pie crust' rim KP II
- 211 CN4194 KP II R10 1301.2
 RD 24 cm.
 Gritty dark brown ware with white and mica flecks (W3). Lid with squarish rim and central funnel. Strap handle from rim to side of funnel. Concentric ridges on upper surface.
 Parallels: S11 201.3 smaller and thinner KP I
- 212 CN4198 KP II R10 1301.1
 RD 22 cm.
 Coarse gritty red ware (W2). Simple lid with squarish rim, rises to wide funnel at centre.
- 213 CN4305 KP I/II? Q9 E 1703.1
 RD 20 cm.
 Coarse light pink buff ware (W2). Lid, flat base, rounded rim; on upper rim concentric ridges rising towards central (?) funnel.
- 214 CN4287 KP I/II R9 1404.1
 RD unknown
 No information on ware. Flat lid with central funnel with small steam outlet. Strap handle springing from side of funnel.

Fig. 75 Unglazed bases (Kale)

O and C

- 215 No CN no. KP I/II? S10 501.8
 RD 7 cm.
 Fine orange ware, red paint inside (possibly classical). Squarish high ring base.
 Previously published: McNicoll 1973a: fig. 14, 29
- 216 CN4052 KP I R11 602.4
 D 7 cm.
 Coarse gritty red and black ware (W8). High conical foot.
- 217 CN4049 KP I/II? S10 501.8
 RD 18 cm.
 Coarse orange ware (W2). Flat base curving to outward inclining wall.
 Parallels: L16 801.4 3 ex.
 801.5 3 ex.
 802.3
 R10 1302.3 KP I
 S9 1101.1 3 ex. KP I/II
 S10 502.1 KP I
 502.10 KP I
 502.10 KP I?
 503.1 KP I
 S11 201.13 KP I
 202.9 KP I
 203.6 KP I
 204.2 KP I
 205.2 2 ex. KP II
 205.4 KP I
 205.6 3 ex. KP II
 207.2 2 ex. KP I

Previously published: M-Nicoll 1973a: 178, fig. 14, 26

218	CN4130	RP I	S10 503.1
	RD 14 cm.		
	Coarse gritty light brown ware, red surfaces, grey core (W3). Flat bottom, angle to outward sloping wall.		
	Parallels: S9 1101.1 2 ex. KP I/II?		
	1102.1 KP I/II?		
	S11 201.10 2 ex. KP I		
	203.4 2 ex. KP II		
	204.8 KP I		
	205.2 4 ex. KP II		
	205.6 KP II		
	205.8 KP II		
	207.1 2 ex. KP II		
219	CN4144	KP I/II?	S9 1101.1
	RD 26 cm.		
	Coarse drab ware (W3). Flat bottom, protrusion at base, upright wall.		
	Parallels: H22 1601.2 CP 2/3		
	L16 801.5 slight outward lean		
220	CN4263	KP I/II?	Q9 E 1702.1
	RD 2.5 cm.		
	Coarse buff ware (W2), black core. Solid base ending in small disc, red painted.		

Fig. 76 Unglazed wares (*kale*)

X3, X4, X5, X6 and X7

221	TK 73/62 CN4361	KP I/II?	R9 1402.1
	D 10.5 cm. x 9.0 cm.		
	Pink ware (W2). Stamped (moulded) tile fragment with raised cross and surround. Probably from the same mould as no. 115.		
222	TK 73/76 CN4333	KP I/II?	T9-11 2101.3
	D 19.6 cm. x 13.2 cm.		
	Pink ware (W2). Stamped (moulded) tile with raised two crosses and surrounds. Probably same mould as no. 114. Scale 1:6		
223	CN4434	KP I	S11 203.7
	RD 13 cm.		
	No information on ware. Pipe with slightly flaring wall, rim flanged o., flat top.		
224	No CN no.	---	Surface (<i>kale</i>)
	Fragment of hookah. Mould made.		
225	CN 4406	KP I/II?	Baulk 2406.1
	RD 52 cm.		
	Coarse ware. Low, straight-sided object; flat base, curving interior. Large central aperture. Function(s) unclear. Pot holder? Scale 1:6		
226	CN4223	KP I	R10 1302.6
	RD 15 cm.		
	Buff orange ware. Annular object, quadrangular section with rounded corners, incised with criss-cross lines around upper rim o. and diagonal slashes across upper surface. Function(s) uncertain. Pot holder?		
227	CN4212	KP I3II?	R9 1403.1
	D 11.1 cm. x 8.4 cm.		
	Dark gritty ware. Curving body sherd with numerous holes. Function: cullender.		

Fig. 77 Moulded, stamped and incised sherds (*kale*)

228	CN4243	KP I/II	R9 1405.1
	D uncertain		
	Fairly fine buff ware (W7? - 10YR 7/3). Body sherd, moulded. Probably a jug.		
229	CN4117	KP I/II?	S10 501.8
	D uncertain		
	Fine pink ware (W7). Body sherd, moulded.		
230	CN4215	KP II	R10 1301.3
	D uncertain		S11 205.6
	Buff ware (W8). Body sherd, moulded.		
231	CN4425	KP II	S11 201.4
	D uncertain		
	Coarse gritty buff ware (W5?). Moulded body sherd with cross in impressed notched rounded o.		
	Parallels: S11 207.1 2 ex. KP II		
	207.2 W3 KP I		

232	CN4125 D uncertain Buff ware (W7). Moulded body sherd with impressed cartwheel design.	KP I	S10 501.9
233	CN4078 D uncertain Coarse gritty buff ware (W2). Moulded body sherd with cross within impressed roundel.	KP II	S10 501.2
234	CN4137 D uncertain Ware n.a. Body sherd with three incised horizontal lines. Between upper and middle, stabbed holes. Between middle and lower, incised wavy line.	KP I	sLo 501.14
235	CN4202 D uncertain Buff orange ware (W2). Body sherd with ridge. Above ridge o., dots; below, incised straight and wavy lines. Dabs of orange paint o.	KP II	R10 1302.1
236	CN4192 D uncertain Gritty buff ware, grey inner face (W8). Body sherd with combed decoration - 6-7 straight parallel lines above and below 6-7 wavy parallel lines.	KP II	R10 1301.2
237	CN4193 D uncertain Coarse grey red ware fired grey i. and red o. Decorated with combed decoration - two straight parallel lines above and below two wavy parallel lines.	KP II	R10 1301.2
238	CN 4152 Max. D approx. 16 cm. Gritty red ware with white flecks (W8). Body sherd with two incised lines above incised cable pattern.	KP I/II	S9 1101.2
239	CN4420 Harsh grey brown ware, grey surface (W3). Strap handle, top or bottom, with triple ridge attachment. Each ridge is incised with four parallel lines.	KP II	S11 201.2
240	CN4079 D uncertain Medium fine grey ware (W8?). Body sherd with incised decoration. Probably intended to be glazed.	KP II	S10 501.2
241	CN4151 Grey gritty ware (W1). Painted red above. Lug (?) handle, incised with lines and dots.	KP I/II	S9 1101.3
<i>Fig. 78 Unglazed wares (church)</i>			
01, 02, 04			
242	CN4331 RD 27 cm. Fairly fine orange ware (W6). Painted red and burnished i. and over rim. Long outward-sloping rim, squarish lip. Possibly a CP 1 or late hellenistic rubbish survival.	CP 2	H21 W 1207.5
02			
243	CN4471 RD 36 cm. Very coarse gritty ware, surfaces and core mostly pink, with dark patches (W8). Hand formed flat bottomed, with slightly outslipping wall and single rounded rim. Four ledge handles with finger indentations low o. Scale 1:6	CP 2	J21 302.3
244	CN4348 RD 14 cm. Very coarse drab ware (W8) with chaff temper and small pebbles. Hand formed, flattish bottom, outslipping wall rounded rim with finger impressed indentations on lip o.	CP 2	H22 1602.6
245	TK 73/59 CN4362 RD 10 cm. Coarse brown ware (W3). Hand formed, flattish bottom, curving wall with simple rim slightly inturned. Strap handle, broken.	CP 2/3	J21 W 1001.1
246	CN4262 RD 23 cm. Coarse drab ware (W8). Hand formed, thin flattish bottom, thick oblique wall with rounded rim.	CP 2/3	H21 1203.8
247	CN4232 RD 11 cm. Gritty black ware (W1 - 5YR 2/1). Carinated wall, thin upright rounded rim.	CP 2/3	H21 1202.4
248	CN4020 RD 28 cm. Close pink ware (W7). Red paint i. and o. Lower body curving to simple upright round rim. Two broad	CP 2/3	J22 702.2

- horizontal lines in body o.
- Parallels: H22 1602.2 2 ex. CP 2
 R9 1404.1 'pie crust' o. KP I/II?
 R10 1301.5 KP I
 1301.7 2 ex. KP 1
 1302.6 KP I
 1302.10 3 ex. 'pie crust' on rim o. KP I
 R11 604.1 KP I
 S10 503.1 3 ex. KP I
 S11 201.4 KP I
- 249 CN4021 CP 2 J22 703.12
 RD 20 cm.
 Coarse buff ware (W2 - 5YR 6/4). Flat bottom, wall slopes out to carination then sloping slightly in to a simple rim thickened o. Band of red paint on upper o.
 Parallels: H21 1201.2 CP 2/3
 H22 1603.5 CP 2
 Previously published: McNicoll 1973a: 175-6
- 250 CN4234 CP 2/3 H21 1202.13
 RD 12 cm.
 Coarse blackened ware (W1 5YR 3/1). Shallow bowl, upright wall, handle projecting above lip.
 Parallels: Q9 E 1702.1 KP I/II
 S8 1502.1 KP I?
- 04
- 251 CN4164 CP 2/3 H21 1202.2
 RD uncertain \approx 20 cm.
 Coarse drab ware (W8). Short upright wall with rounded rim. Flatish bottom.
- 252 CN4280 CP 2/3 H21 1202.14
 RD ca. 30 cm.
 Coarse brown ware with white grits (W3). Flat bottom with projecting heel, wall slightly outsloping, rounded rim.
 Parallels: L15 800.2
- 253 CN4077 CP 2/3 J22 703.10
 RD 50 cm.
 Coarse gritty ware (W2). Slightly outsloping wall, bevelled i., and protruding o. Wavy line incision on rim i., simple ledge handle o.
 Parallels: Q10 E 1801.6 KP I
 R9 1400.1 K cleaning
 1401.1 2 ex. red paint, no incision KP I/II?
 R10 1302.3 KP I
 1303.4 KP I
 1303.5 KP I
 S9 1101.1 KP I/II
 Previously published: McNicoll 1973a: 179-80
- 254 CN4205 CP 2/3 H21 1202.1
 RD 44 cm.
 Gritty pink to light brown ware with white grits (W3). Wall curving up to angle i., rim curving and projecting o.
 Parallels: H21 W 1207.4 red paint i. and o. CP 2
 R10 1303.3 red paint i. and o. KP I
- 255 cf. CN4074 CP 2/3 J22 702.2
 RD 50 cm.
 Coarse gritty pink ware (W2). Wall outsloping, thickened everted rim with lip bevelled i. and ridge o.
- 256 CN4301 CP 2/3 H21 1202.1
 RD 42 cm.
 Coarse brown ware with white grits (W3). Wall curving up to square protruding rim with 'pie crust' decoration o. Simple ledge handle below rim.
- Fig. 7^a Unglazed wares (church)
- 03, 05
- 257 CN4233 CP 2/3 H21 1202.8
 RD 22 cm.
 Outward curving wall. Squarish rim.
- 258 CN4076 CP 2/3 J22 703.2
 RD 36 cm.
 Coarse gritty red ware, red painted (W3). Wall curving outward and thickening to squarish lip projecting o.
 Previously published: McNicoll 1973a: 179-80
- 259 CN4074 CP 2/3 J22 702.2
 RD 36 cm.

Coarse gritty pink ware (W2). Wall curving upwards and outwards, squarish thickened everted rim, flat on top. Ridge on upper body o.
 Parallels: L15 801.9 red paint
 S11 201.14 red paint on rim KP 1

- 260 CN4339 CP 2/3 K21 103.1
 RD 34 cm.
 Rim curving up to squarish rim.
- 261 No CN no. CP 2/3 J22 702.2
 RD 40 cm.
 Coarse red ware, black core (W6). Straight wall, sloping outward to simple rim. Ledge handle high on body o.
 Previously published: McNicoll 1973a: 179-80
- 262 CN4073 CP 2/3 J22 702.2
 RD 30 cm.
 Coarse creamy ware (W2). Painted streaky brown o. Wall carinated, then curving in and up to thick squarish everted rim. Thumb impressed 'pie crust' decoration on lower rim and shoulder o.
 Previously published: McNicoll 1973a: 179-80
- 263 CN4045 CP 2/3 J22 703.2
 RD 40 cm.
 Coarse buff ware (W2). Wall curves up to carination. Short neck and squarish everted rim with pronounced angle at joint with body i.
- 264 CN4044 CP 2/3 J22 702.2
 RD 30 cm.
 Coarse gritty dark ware (W1). Outward sloping wall thickened rim with internal bevel.
 Previously published: McNicoll 1973a: 177-8
- 05
- 265 CN4365 CP 2/3 K21 103.7
 BD 6.2 cm., H 4.7 cm., L 10.7 cm.
 Very coarse brown ware with white grits (W3). Red paint i. and o. except lower 1.5 cm. and base.
- Fig. 80 Unglazed wares (church)*
- C1, C2
- 266 CN4209 CP 2 J21 W 1003.1
 RD 36 cm.
 Coarse red ware (W2). Massive wall insloping to very short neck and simple round upright rim with ridge o.
- 267 CN4321 CP 2 H22 1603.5
 RD 36 cm.
 Coarse brown ware with white grits (W3). Insloping wall to short upright neck and massive squarish outward projecting rim.
 Parallels: S11 200.5 K cleaning
- 268 CN4206 CP 2/3 H21 1202.1
 RD 27 cm.
 Buff gritty ware (W2). Wall slopes in to massive outward-projecting rounded rim.
- 269 CN4349 CP 2 H22 1602.6
 RD 23 cm.
 Coarse grey brown ware, fired black, grey and reddish-brown o. (W6). Wall slopes in to everted rim with rounded edges narrowing to outer lip. Small ridge below lip o.
- 270 CN4199 CP 2/3 H21 1201.3
 RD 45 cm.
 Coarse gritty drab ware (W8). Wall curves up to outturned lip with heavy ridge o.
- C2
- 271 CN4269 CP 2 H22 1602.2
 RD 8 cm.
 Harsh pink ware (W5). Dabs of orange paint on neck and handle. Incurving wall of body, upright neck with pronounced ridge and rim thickened o. Strap handle from neck to ridge to upper body.
 Parallels: S11 206.1 W2 KP 11
- 272 CN4007 CP2/3 J22 703.2
 RD 8 cm.
 Fairly coarse gritty grayish ware firing orange red at surface (W8). Shape as 269, with longer neck and less pronounced ridging and thickening. Incised parallel lines around neck.
 Previously published: McNicoll 1973a: 175-6
- 273 CN4237 CP 2 J21 W 1002.3
 RD 12 cm.
 No record of ware. Wall curves in to upright neck with slightly everted rim bevelled i. Strap handle from upper neck to upper body with impressed holes and parallel lines.

- 274 CN4006 CP 2/3 J22 703.2
 RD 12 cm.
 Fairly coarse gritty pink ware (W3). Upright neck, simple rounded rim thickened o.
 Previously published: McNicoll 1973a: 175-6
- 275 CN4166 CP 2/3 H21 1202.2
 RD 16 cm.
 Light orange buff ware (possibly W6). Thick upright neck with pronounced ridge o. and rim thickened with overhang o.
 Parallels: Q9 1701.1 KP II
 R9 1400.1 K cleaning
 R10 1301.7 KP I
- 276 CN4165 CP 2/3 H21 1202.2
 RD 12 cm.
 Coarse buff ware (W2). Upright neck, ridge o. just below thickened lip, slightly flat on top.
- Fig. 81 Unglazed wares (church)
- C2, C3
- 277 CN4178 CP 2/3 H21 1201.5
 RD 18 cm.
 Coarse pink orange ware with white grits (W3). Upright neck, thickened rounded rim protruding o., ridge below. Incised parallel horizontal lines with wavy line between on lower neck.
 Parallels: L15 801.2 W2 no decoration
 Q10 E 1801.7 W2 no decoration KP I
 1801.11 W2 no decoration KP I
 R9 1401.1 W2 no decoration KP II
 1402.1 W2 no decoration KP I/II?
 R12 1904.1 KP I/II?
- 278 CN4314 CP 2 H22 1602.7
 Max. D 16 cm., BD 10 cm.
 Medium coarse brown ware with white grits (W3). Globular jar with flat base. Stump of handle on upper body.
 Parallels: H22 1601.7 CN4335 - larger - not drawn CP.2
- 279 CN4352 CP 2 K21 103.2
 RD 16 cm., BD 14 cm., H 11 cm.
 Coarse drab ware, gritty (W2/3 - 5YR 5/4). Swelling body, short upright neck with rounded rim. Small lug handle on neck. Painted red o. and over rim i.
- C3
- 280 CN4334 CP 2/3 H22 1601.7
 RD 20 cm., MD 34.5 cm.
 Coarse brown ware with white grits (W3). Globular body, short upright neck, rim slightly thickened o. Two strap handles from rim to upper body. Two incised horizontal lines on neck with short diagonal gashes between. Dark brown paint over rim and in vertical dribbles down two-thirds of body o.
 Parallels: H21 W 1207.7 CP 2
 S11 200.11 K cleaning
- 281 CN4204 CP 2/3 H21 1202.1
 RD 24 cm.
 Gritty red brown ware with white flecks (W3). Shape and decoration similar to 280, but neck curves out to simple round rim. Short diagonal gashes on neck; pair of long diagonal lines incised on body.
- 282 CN4035 CP 2 J22 703.12
 RD 36 cm.
 Coarse gritty micaceous red ware (W8). Globular body, hollow with squarish rim. Pair of diagonal incised lines on upper body with irregular line of dots between.
- 283 CN4156 CP 2/3 H21 1201.2
 RD 28 cm.
 Drab coarse ware (W1). Wall curves in to short out-curving neck with squared lip.
 Parallels: H21 1202.13 CP 2/3
 1203.1 CP 2/3
 H22 1601.2 CP 2/3
 Q9 1701.1 heavier KP I/II?
 R9 1402.1 KP I/II?
 R10 1404.1 coarse with incised lines KP I/II
 S8 1302.1 KP II
 S8 1502.1 KP I
- 284 CN4208 CP 2/3 J21 W 1001.4
 RD 15 cm.
 Gritty grey ware (W1). Shape similar to 283 with slight ridge on lip o. and groove i. Thick wavy incised line on neck o.
 Parallels: L16 801.2 no incision
 802.1 no incision
 802.4 2 ex. no incision

R10 1300.4 undecorated K cleaning
 S11 200.9 K cleaning
 201.2 2 ex. no incision KP II
 203.10 no incision KP II

Fig. 82 Unglazed ware (church)

- C3, X1
- 285 CN4036 CP 2/3 J22 703.2
 RD 28 cm.
 Rather coarse micaceous reddish ware, red orange o. blackened i. (W1). Body curves inward to short outward-curving neck with simple rim.
- 286 CN4046 CP 2/3 J22 703.2
 RD 14 cm.
 Coarse buff ware (W2). Wall slopes in to ridge at shoulder, short insloping neck, and lip thickened o. with horizontal grooves o.
 Previously published: McNicoll 1973a: 177-8
- 287 CN4033 CP 2/3 J22 702.2
 RD 30 cm.
 Coarse gritty grey ware (W8). Painted red o. Wall sloping slightly i. then curving out to rim with lip angled o.
 Parallels: J21 W 1001.1 CP 2/3
 S10 501.3 KP II
 Previously published: McNicoll 1973a: 177-8
- 288 CN4043 CP 2/3 J22 702.2
 RD 27.5 cm.
 Gritty micaceous ware, blackened o. (W1). Squat bulbous body, curving inward to short, slightly insloping neck with everted, squarish lip with angle i.
 Previously published: McNicoll 1973a: 177-8
- 289 CN4237 CP 2 J21 W 1002.3
 RD 18 cm.
 Gritty purply brown ware. Insloping wall, upright neck, narrow everted rounded lip with angle i. Slight ridge at junction of body and neck. Incised wavy line on body o.
 Parallels: Q9 E 1702.1 KP I/II
 S11 201.3 KP II
- 290 CN4037 CP 2/3 J22 703.2
 RD 22 cm.
 Fragment of insloping wall, long upright neck curving gently outward to thickened rim with flattish top.
 Previously published: McNicoll 1973a: 177-8
- X1
- 291 CN4261 CP 2/3 H22 1603.1
 RD 13-16 cm.
 Gritty brown coarse ware, blackened underneath (W1). Flat underside, rounded edge with 'pie crust' above. Spiral ridging with herringbone gashes. Swelling for handle at outer edge.
 Parallels: S11 205.2 no gashes KP II
- 292 CN4282 CP 2/3 H21 1204.4
 RD 10 cm.
 Coarse black ware (W1). Flat under and topside, rounded edge. Incised lines.
 Parallels: L16 801.6
- 293 CN4163 CP 2/3 H21 1202.2
 RD 30 cm.
 Coarse ware (W8?). Rising slightly and thickening to centre; on upturned edge light 'pie crust' decoration and incised lines.
 Parallels: R9 1401.1 no incision KP II
 S11 201.1 no incision KP II
- 294 CN4058 CP2/3 H22 1601.5
 RD 12 cm.
 Coarse gritty brown ware, blackened below (W3). Simple lid flat on top and underneath with squarish rim. Radiating lines of small parallel gashes on top.
- 295 CN4240 CP 2/3 H21 1202.13
 RD 20 cm.
 Coarse pink grey ware (W8). Lid flat on top and underneath, slightly sloping edge. Impressed 'pie crust' decoration on upper edge and on top.
 Parallels: L15 801.5
 S11 203.7 KP I
- 296 CN4114 CP 2/3 H21 1201.4
 RD 20 cm.
 Ware not recorded. Lid slightly convex underneath with angular sloping edge. Irregularly placed central handle.

Fig. 83 Unglazed wares; bases (church)

X6 (†), X2 or 3			
297	CN4181 RD 28 cm. Buff orange ware with flecks of mica (W3). Fragment of a large ceramic ring with trapezoidal section, incised design on top.	CP 2/3	H21 1201.5
X2 or X3			
298	CN4180 ML 6 cm., Th. 1.4 cm. Light brown gritty ware (W3?). Fragment of a flat object with edge turned up. Incised circle on lower surface.	CP 2/3	H21 1201.5
299	CN4210 Rivet W 1.3 cm., L 3.1 cm. Sherd with iron rivet <i>in situ</i> . Parallels: R9 1103.1 KP I/II	CP 2/3	J21 W 1003.1
300	CN4250 BD 3.5 cm. Gritty coarse brown ware (W3). Pedestal base.	CP 2/3	H22 1601.2
301.	CN4249 BD 5.5 cm. Coarse gritty putty-coloured ware (W8). Flat bottom, outward sloping wall. Edges of base apparently shaved off while clay was leather hard. Parallels: H22 1602.7 CP 2 Q9 E 1704.1 KP I/II? Q10 E 1801.3 KP II R10 1302.5 KP I R12 1903.2 KP I S11 205.2 2 ex. KP II	CP 2/3	J21 W 1002.4

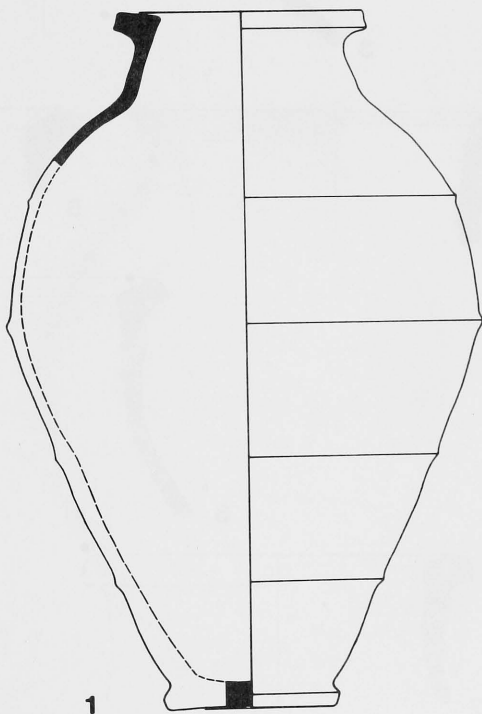


Fig. 41 Unglazed wares (kale)

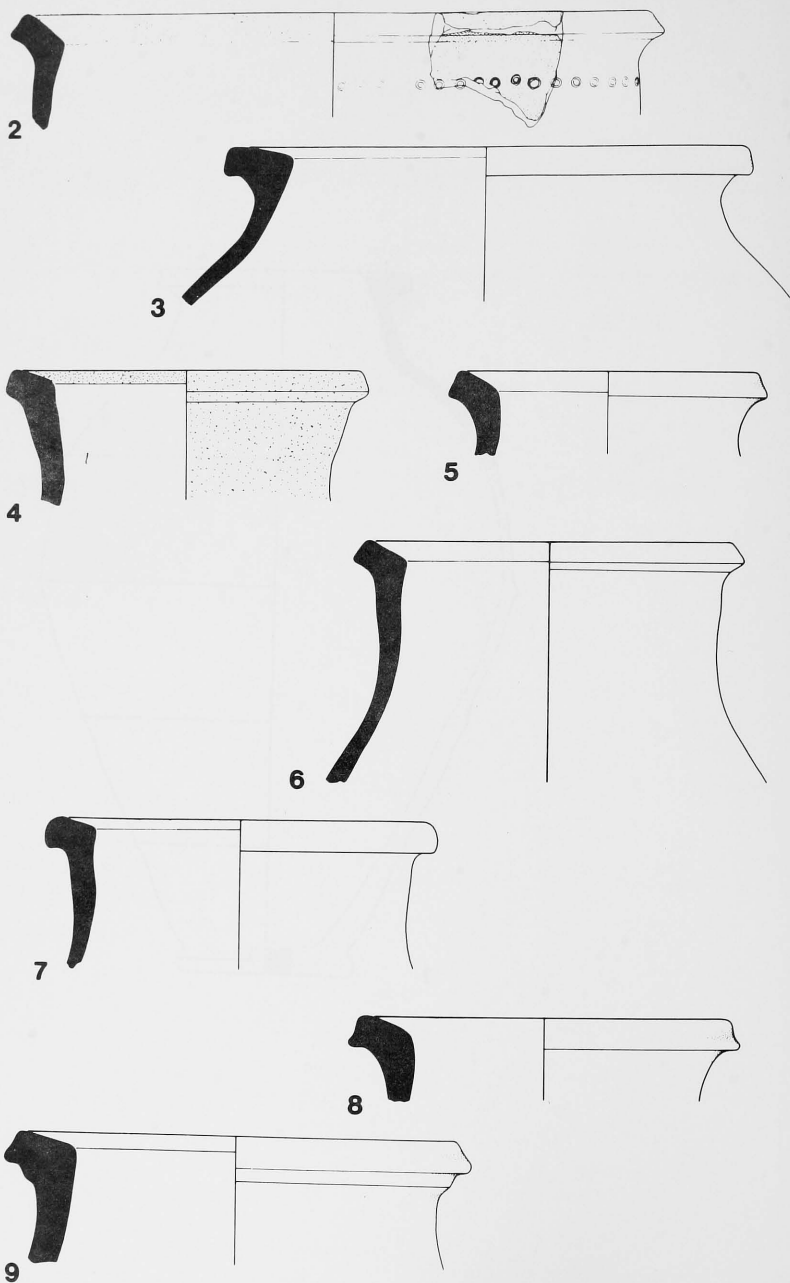


Fig. 42 Unglazed wares (k)

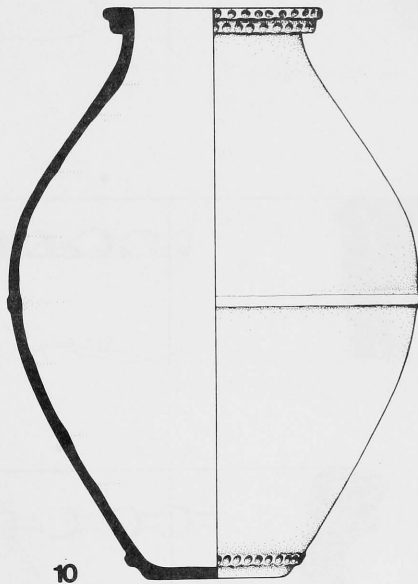


Fig. 43 Unglazed wares (kale)

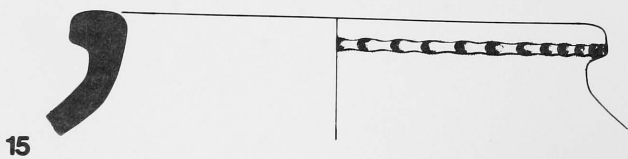
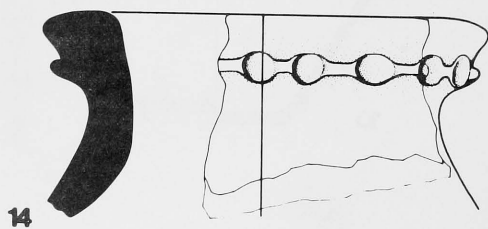
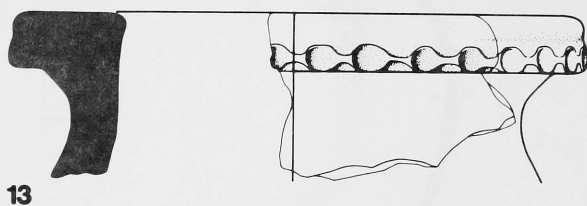
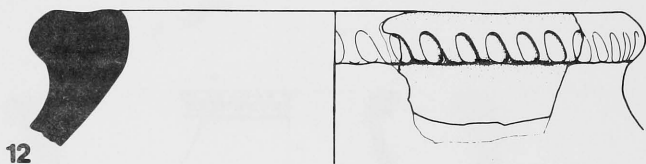
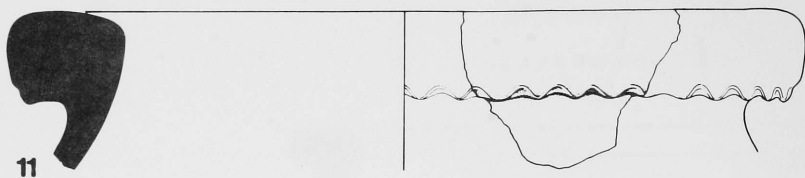


Fig. 44 Unglazed wares (ka)

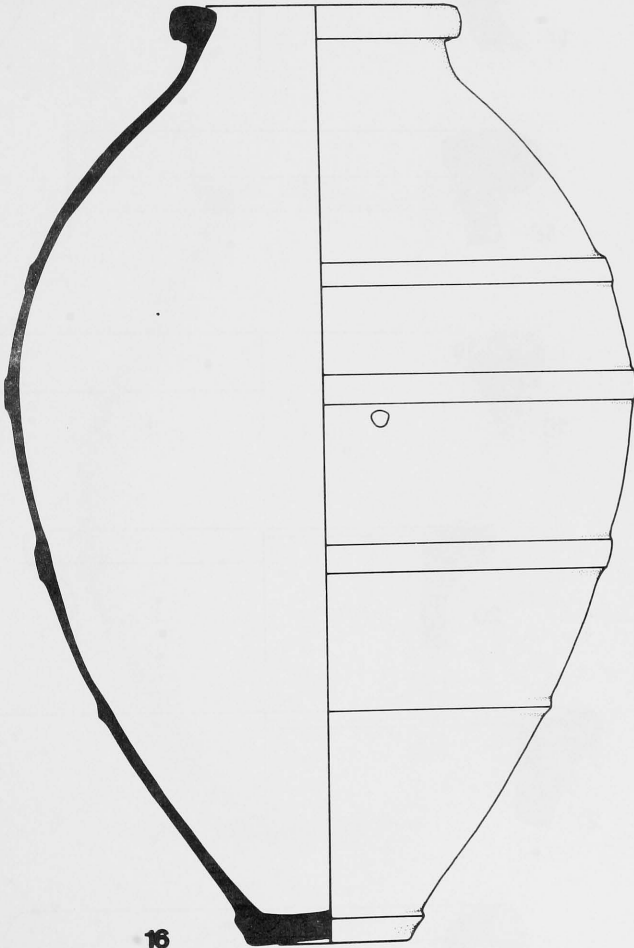


Fig. 45 Unglazed wares (kale)

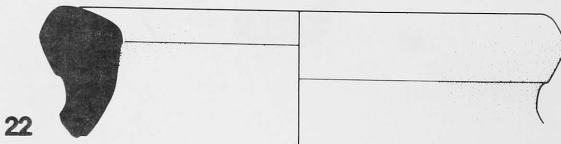
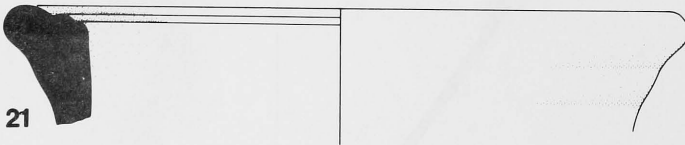
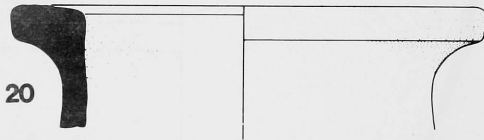
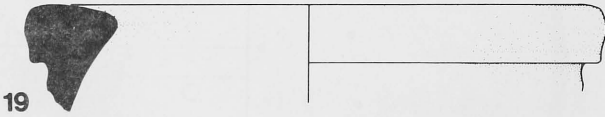
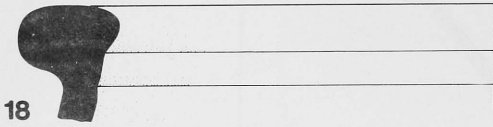
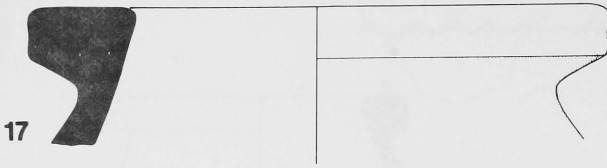


Fig. 46 Unglazed wares (kame)

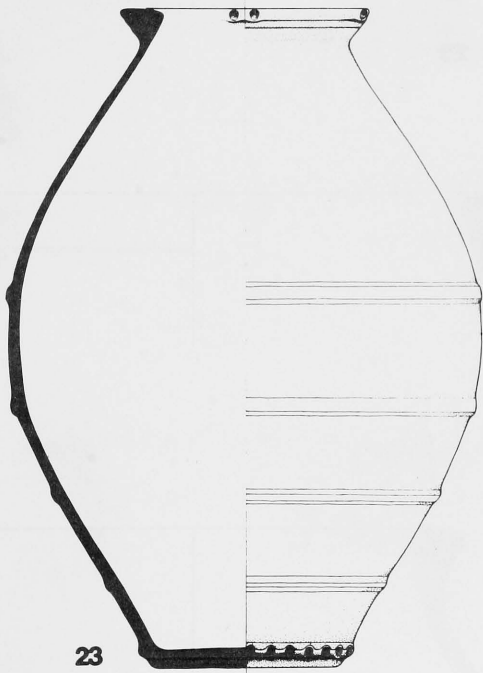
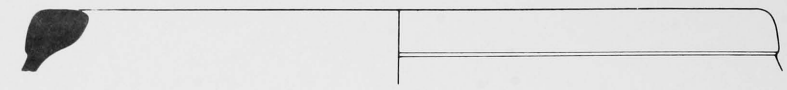
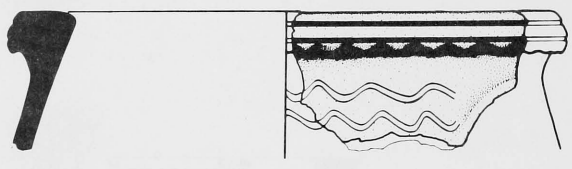


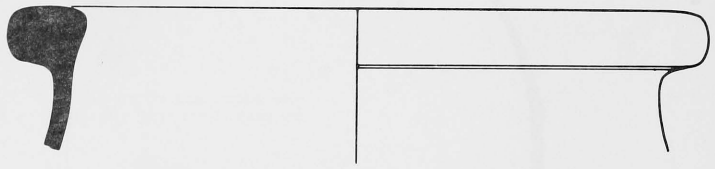
Fig. 47 Unglazed wares (kale)



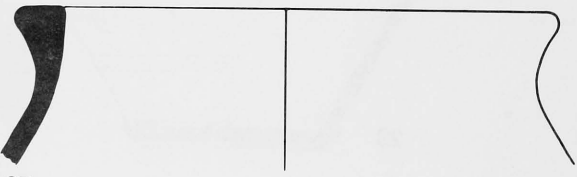
24



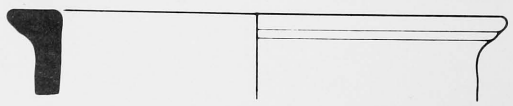
25



26

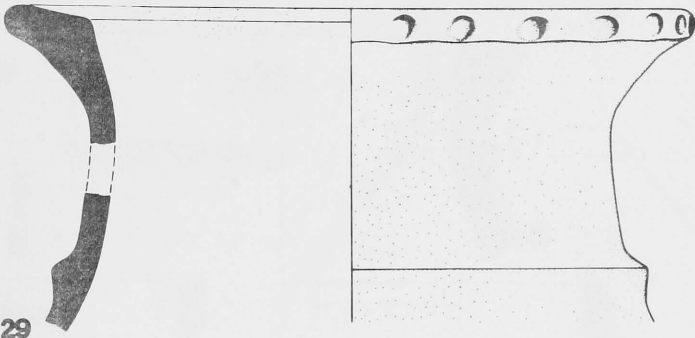


27

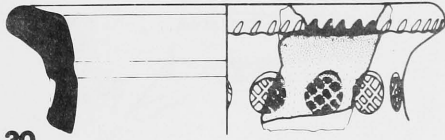


28

Fig. 48 Unglazed wares (ka...)



29



30

Fig. 49 Unglazed wares (kale)

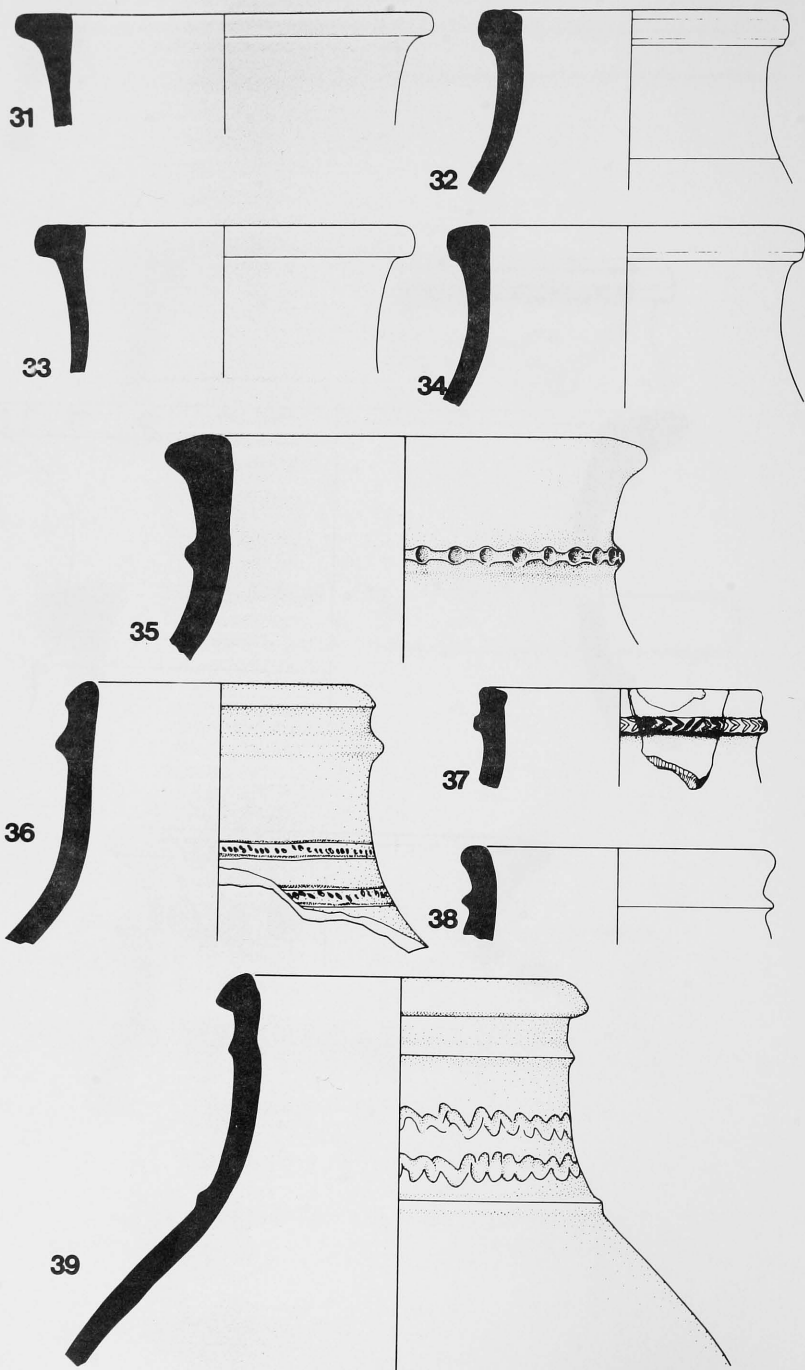


Fig. 50 Unglazed wares (kuzo)

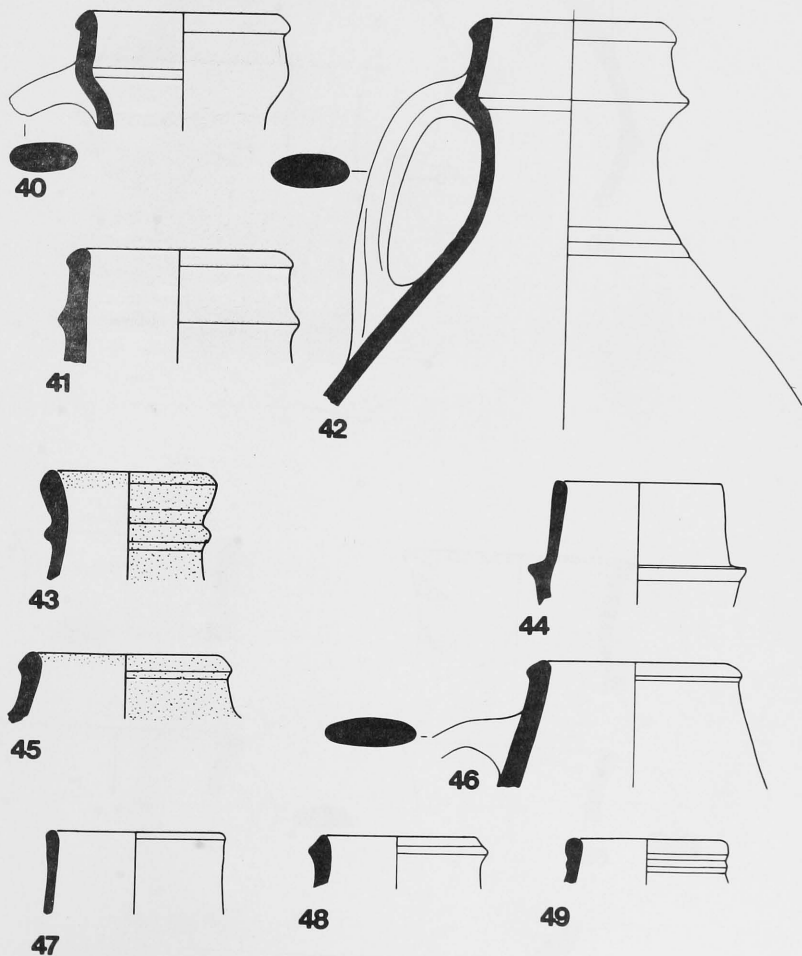
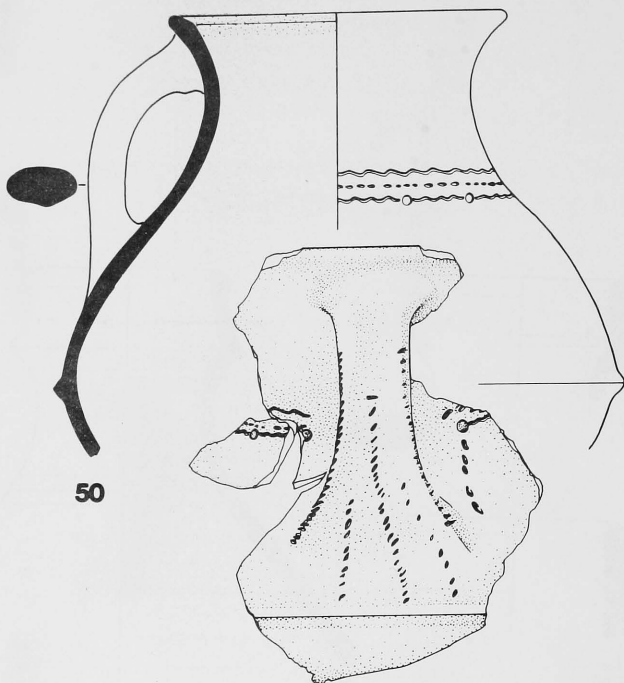
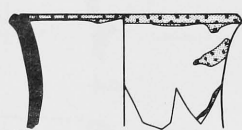


Fig. 51 Unglazed wares (kale)



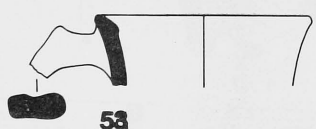
50



51



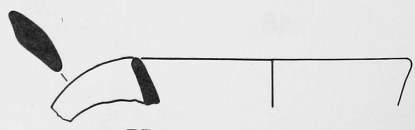
52



53



54



55

Fig. 52 Unglazed wares (k)

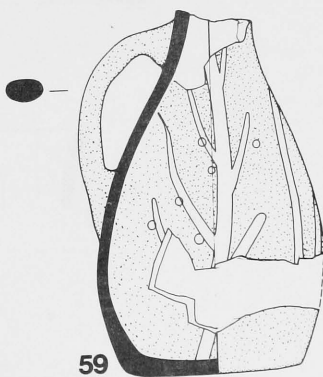
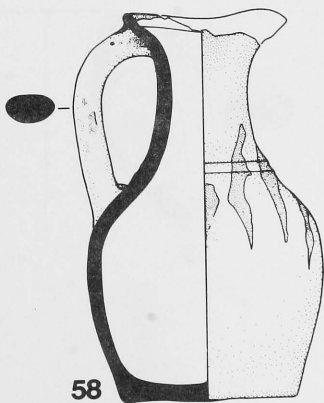
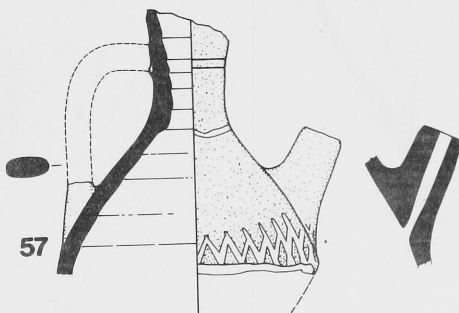
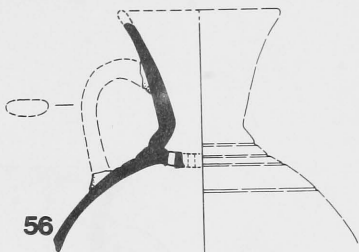
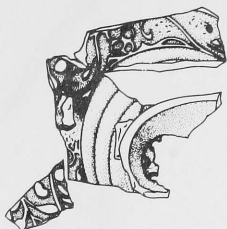


Fig. 53 Unglazed wares (kale)

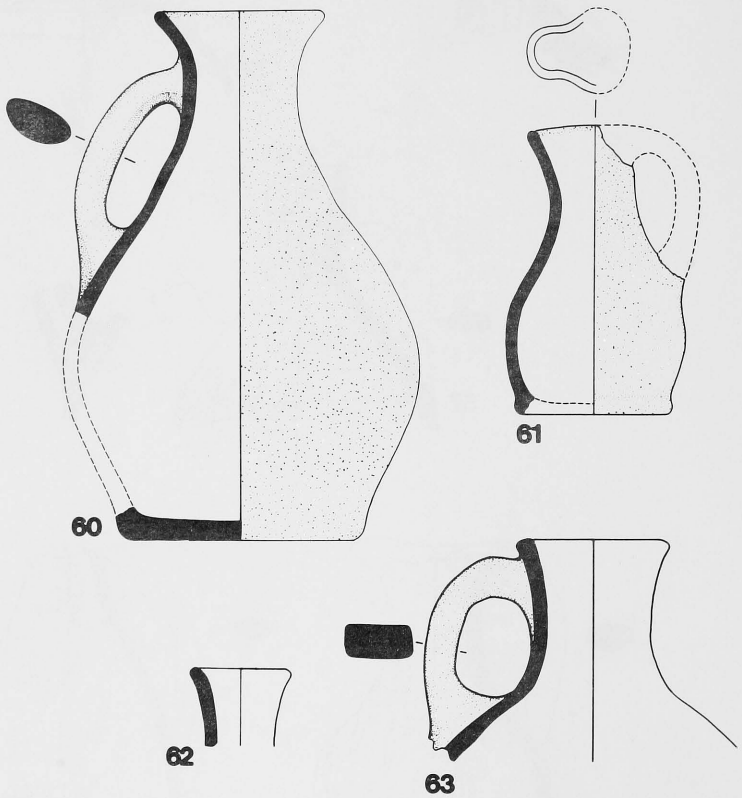


Fig. 54 Unglazed wares (K...)

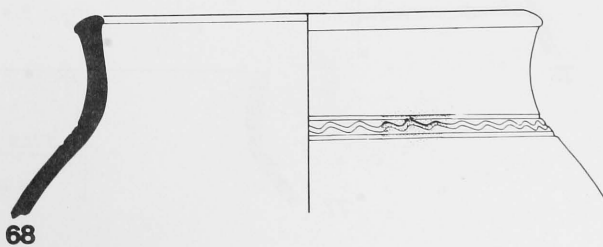
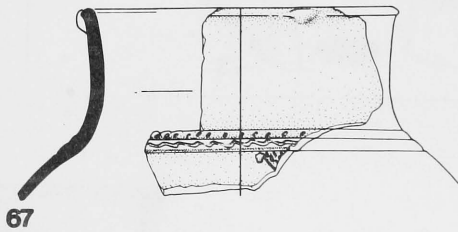
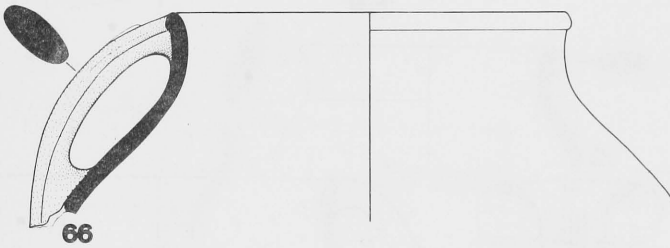
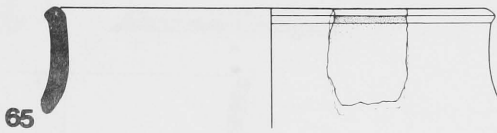
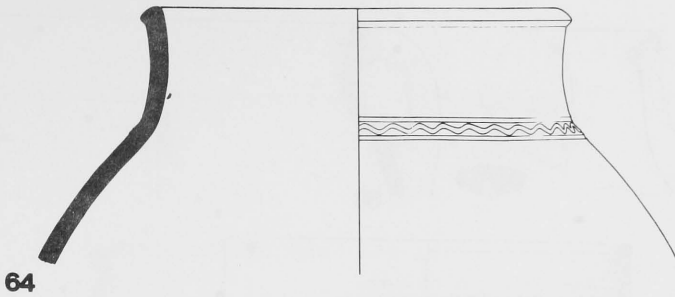


Fig. 55 Unglazed wares (kale)

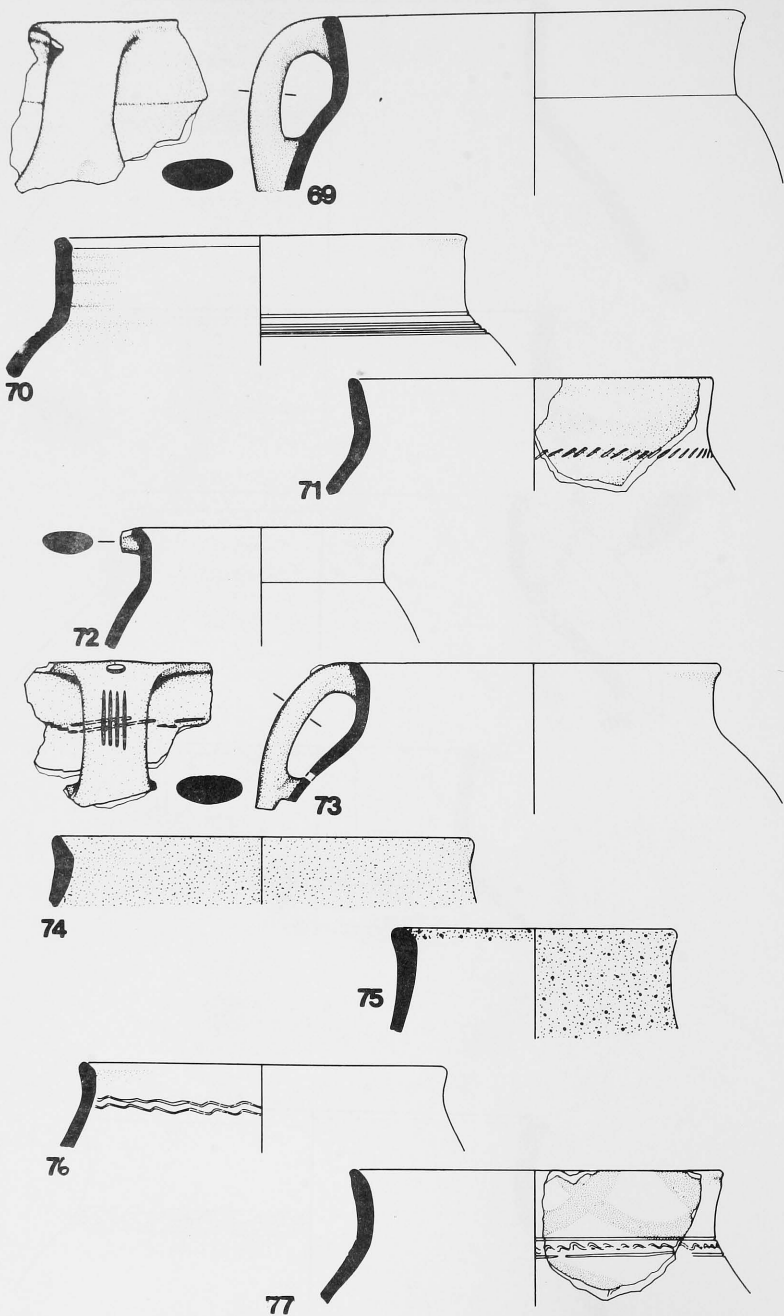


Fig. 56 Unglazed wares (k)

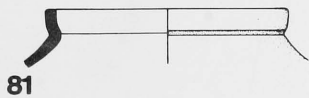
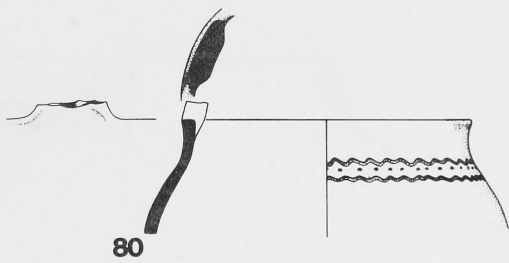
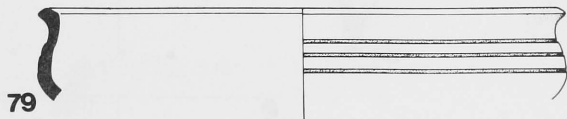
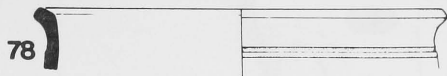


Fig. 57 Unglazed wares (kale)

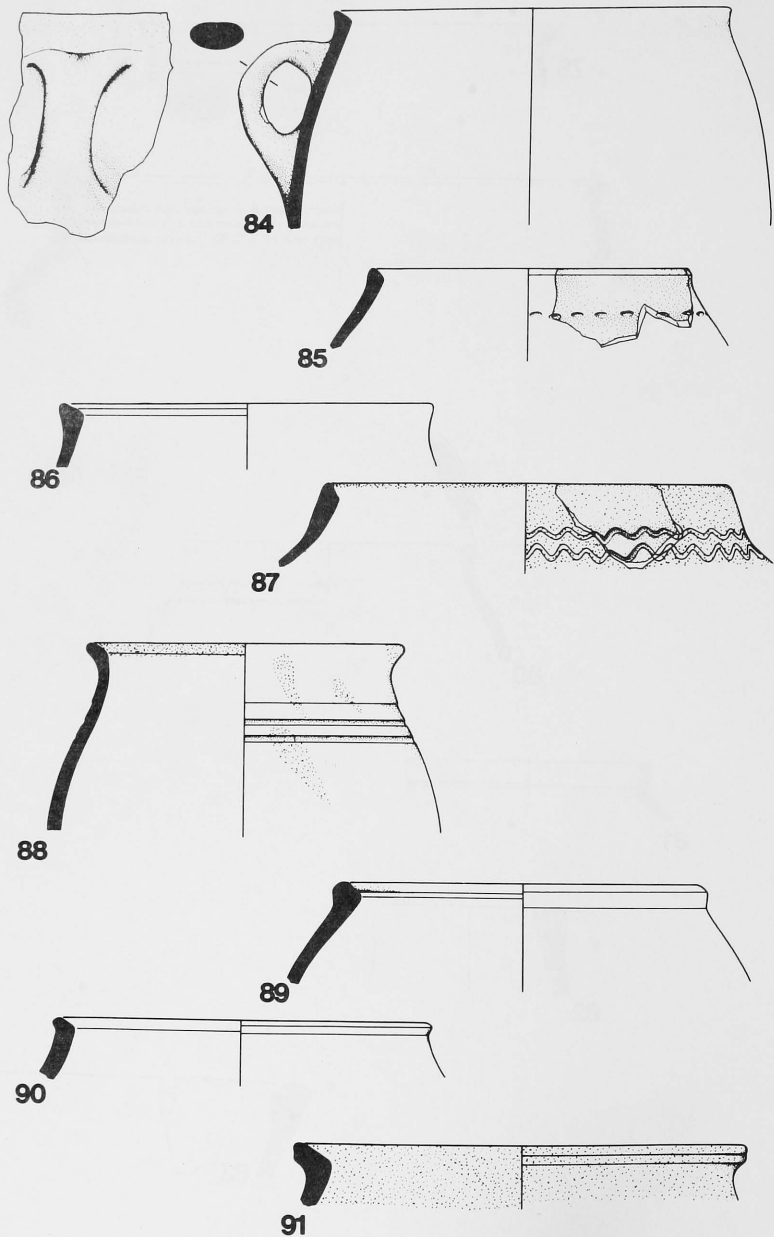


Fig. 58 Unglazed wares (k...)

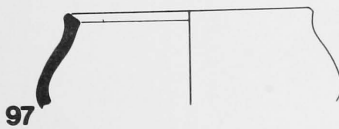
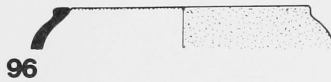
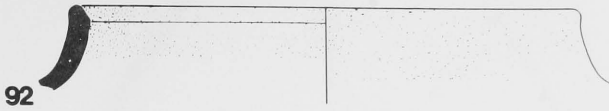


Fig. 59 Unglazed wares (kale)

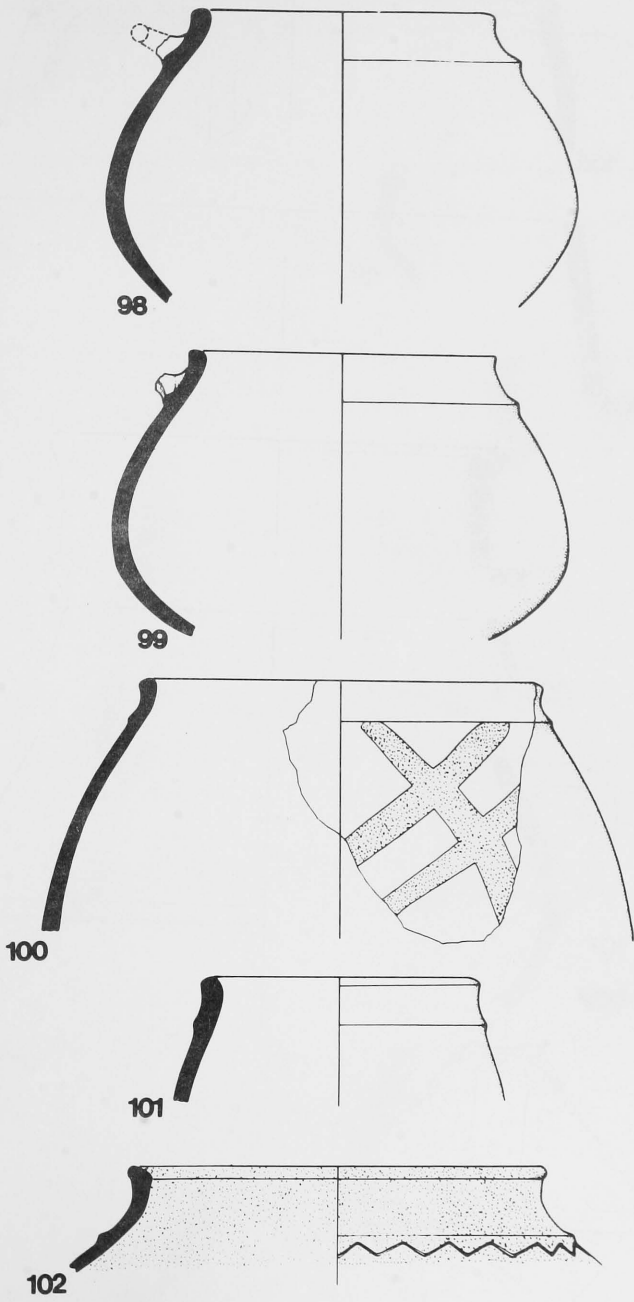


Fig. 60 Unglazed wares (kale)

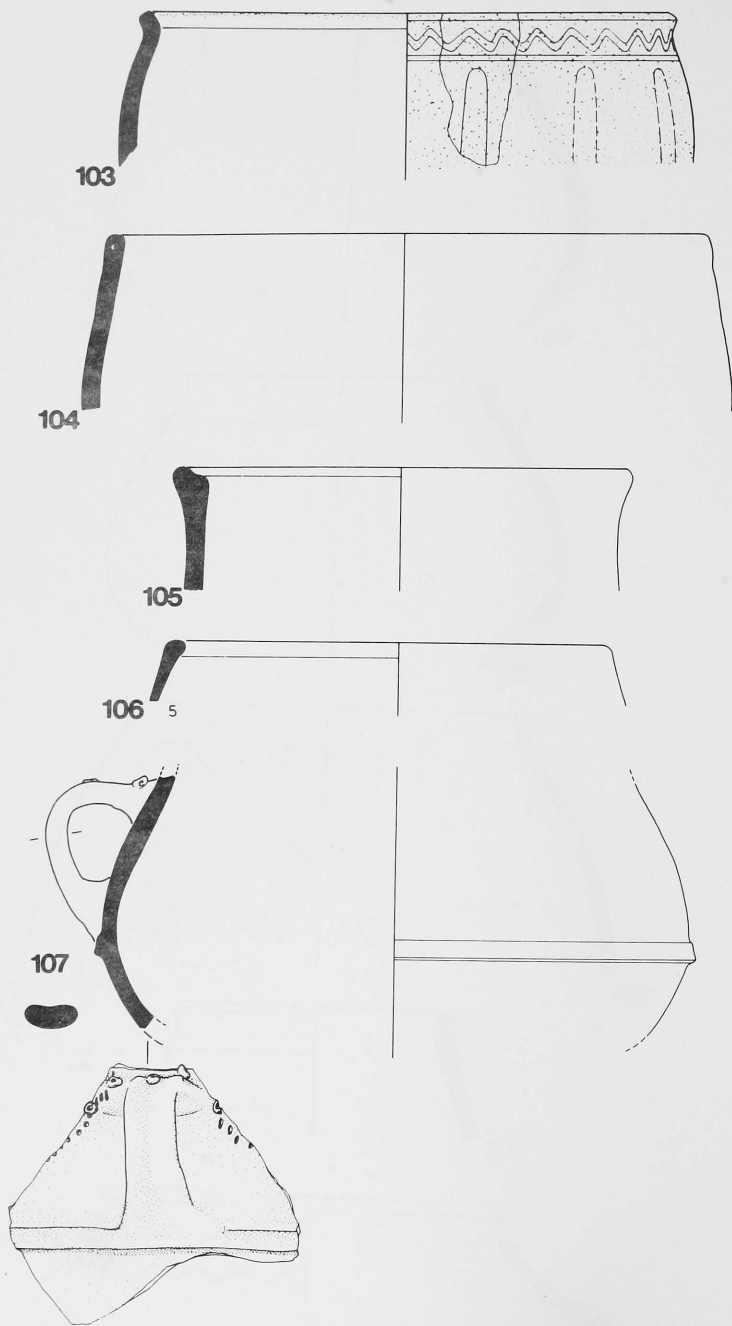
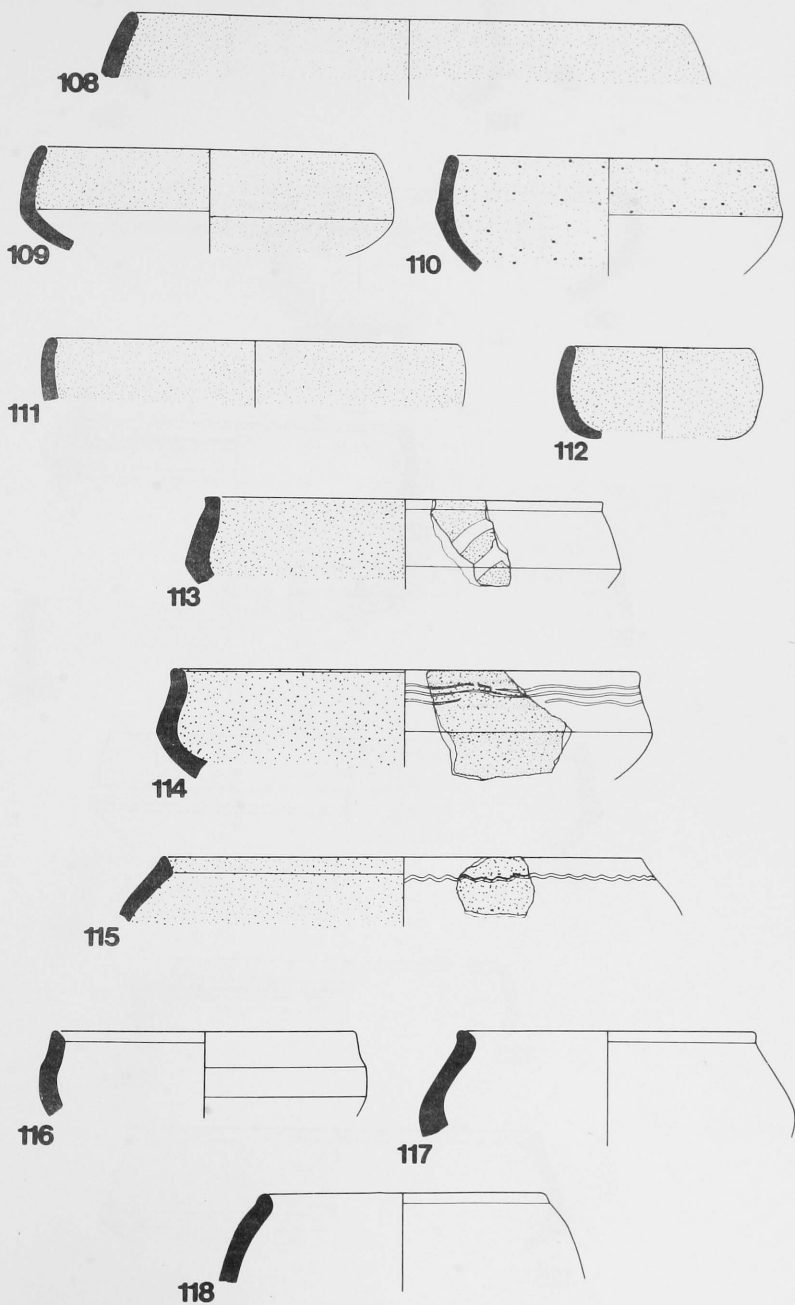


Fig. 61 Unglazed wares (k...)



ig. 62 Unglazed wares (kale)

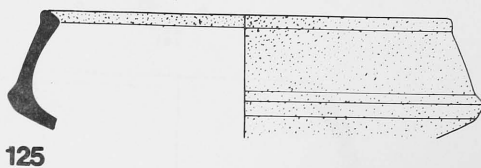
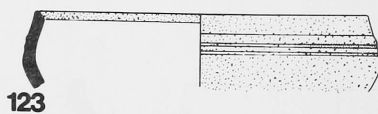
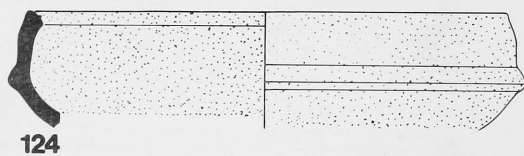
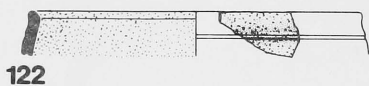
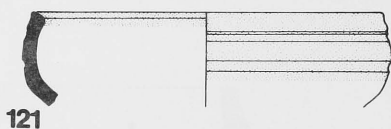
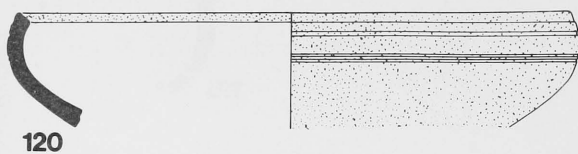
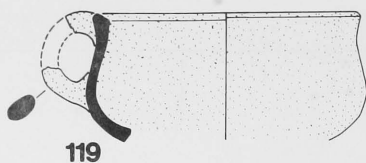
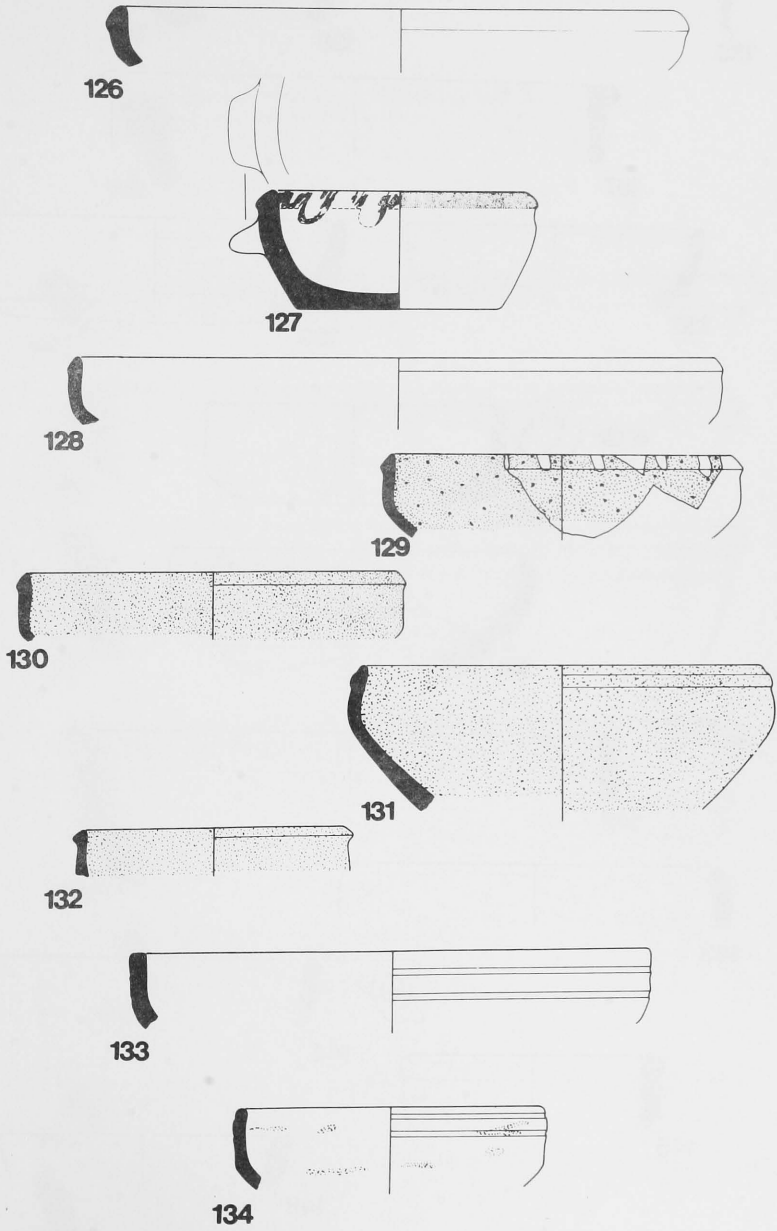


Fig. 63 Unglazed wares (k...)



ig. 64 Unglazed wares (kale)

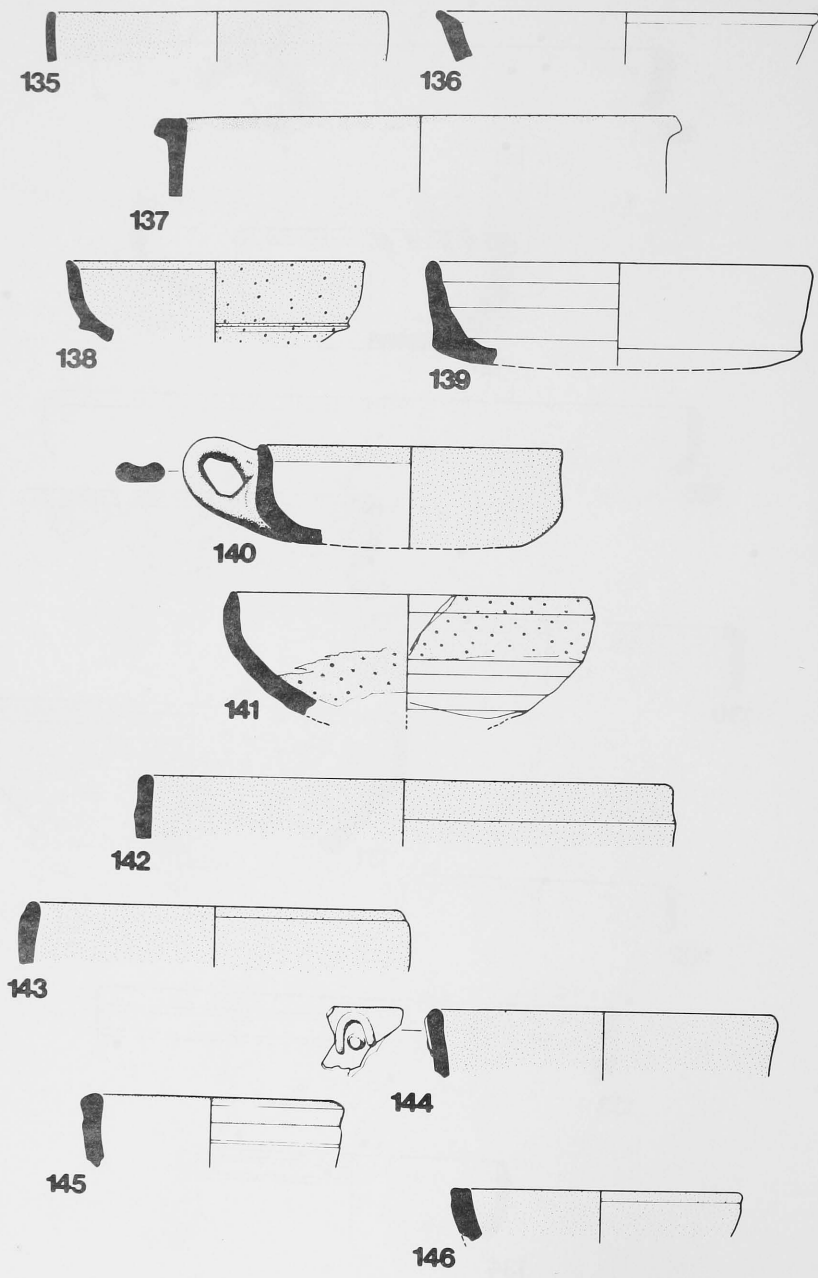


Fig. 65 Unglazed wares (kalan)

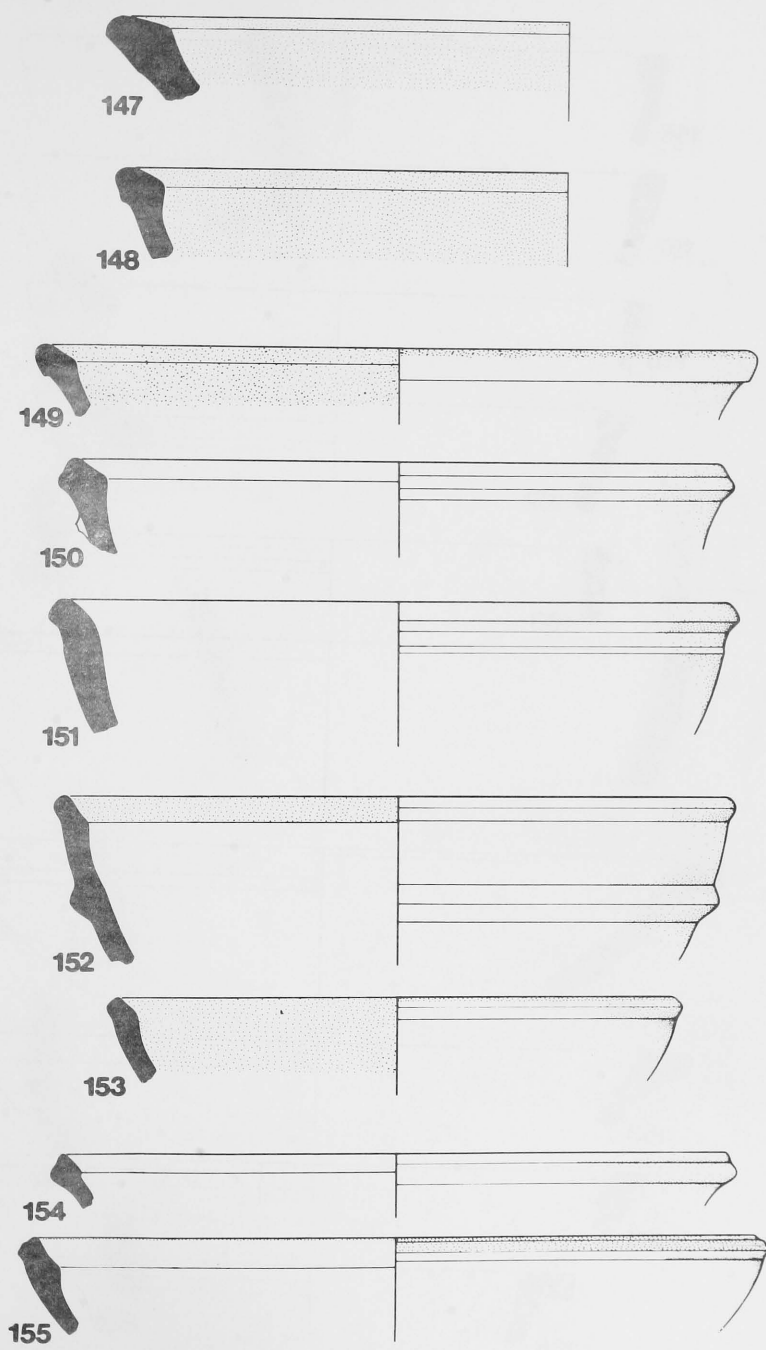


Fig. 66 Unglazed wares (kale)

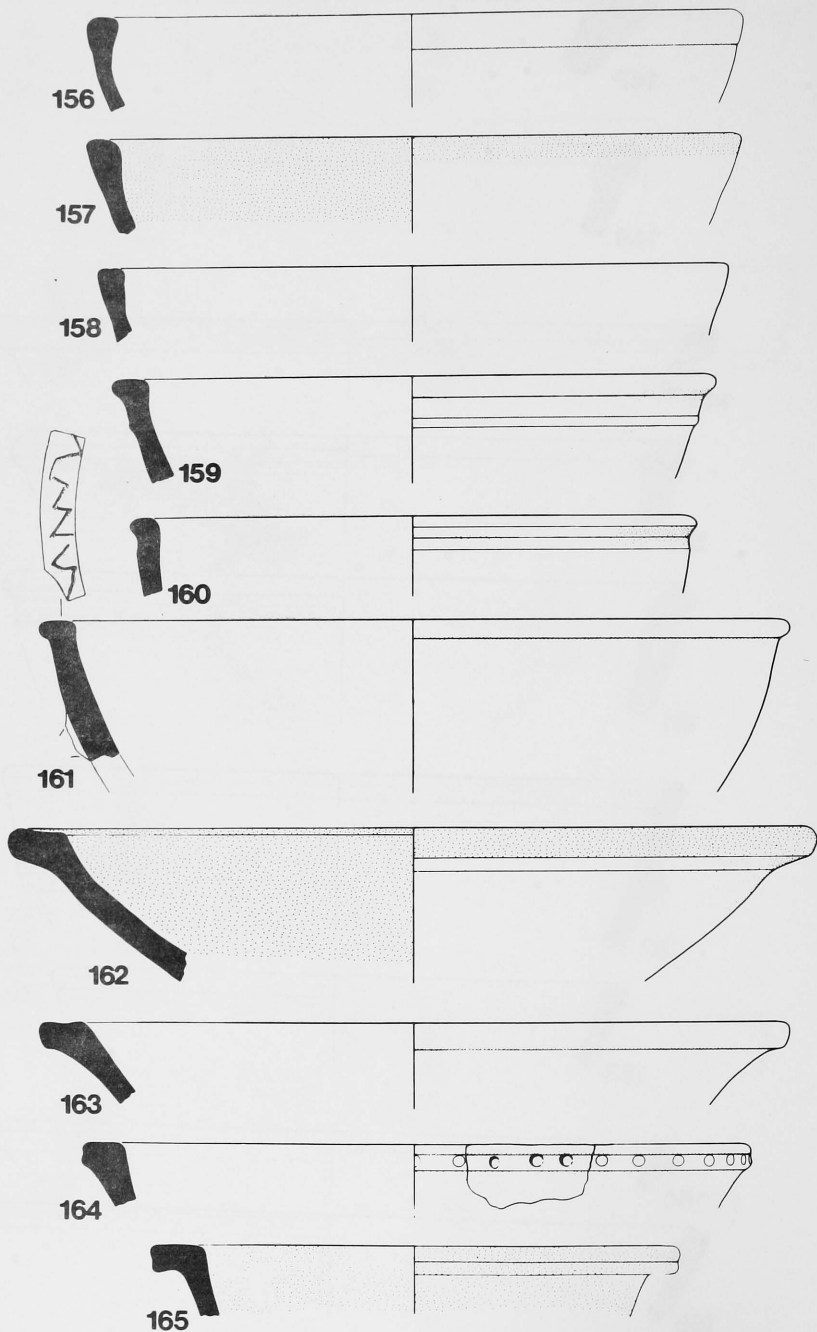


Fig. 67 Unglazed wares (

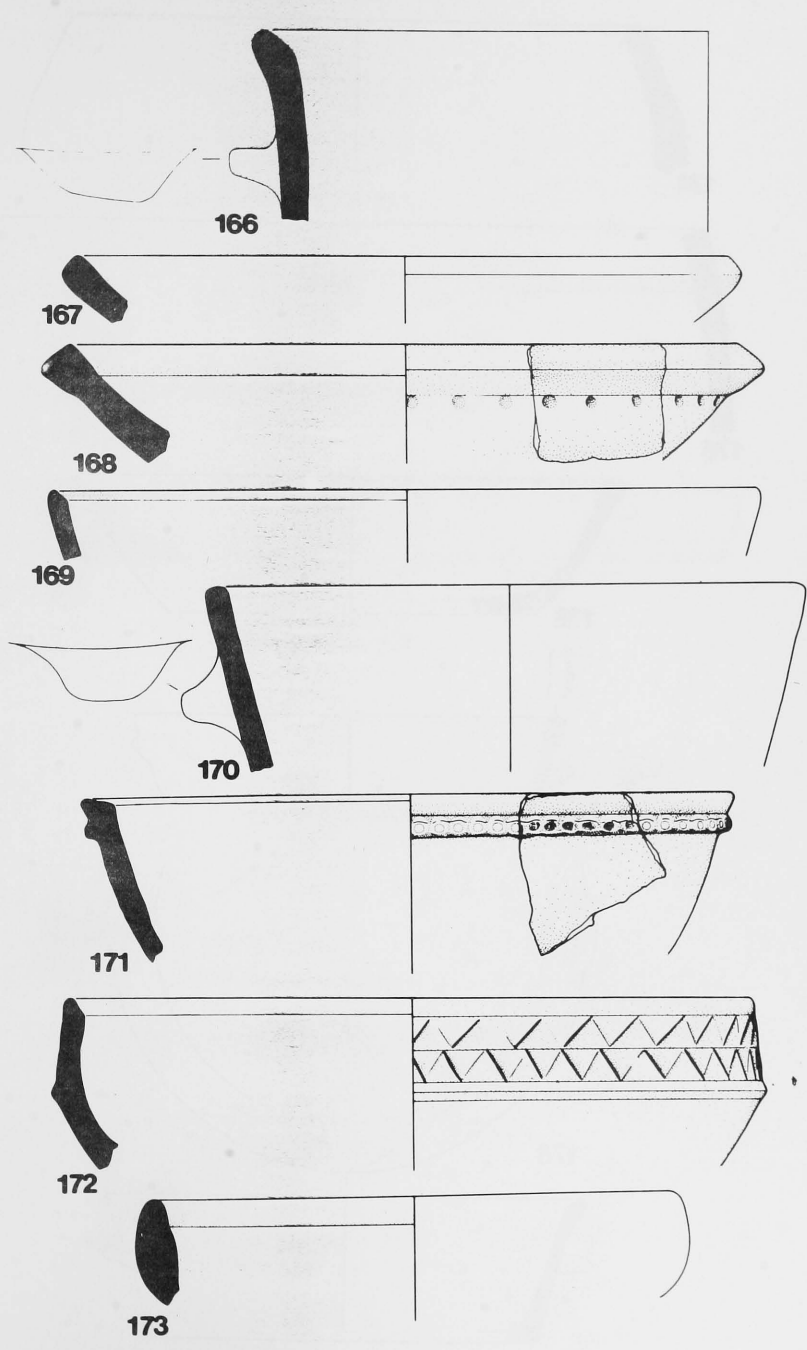


Fig. 68 Unglazed wares (kale)

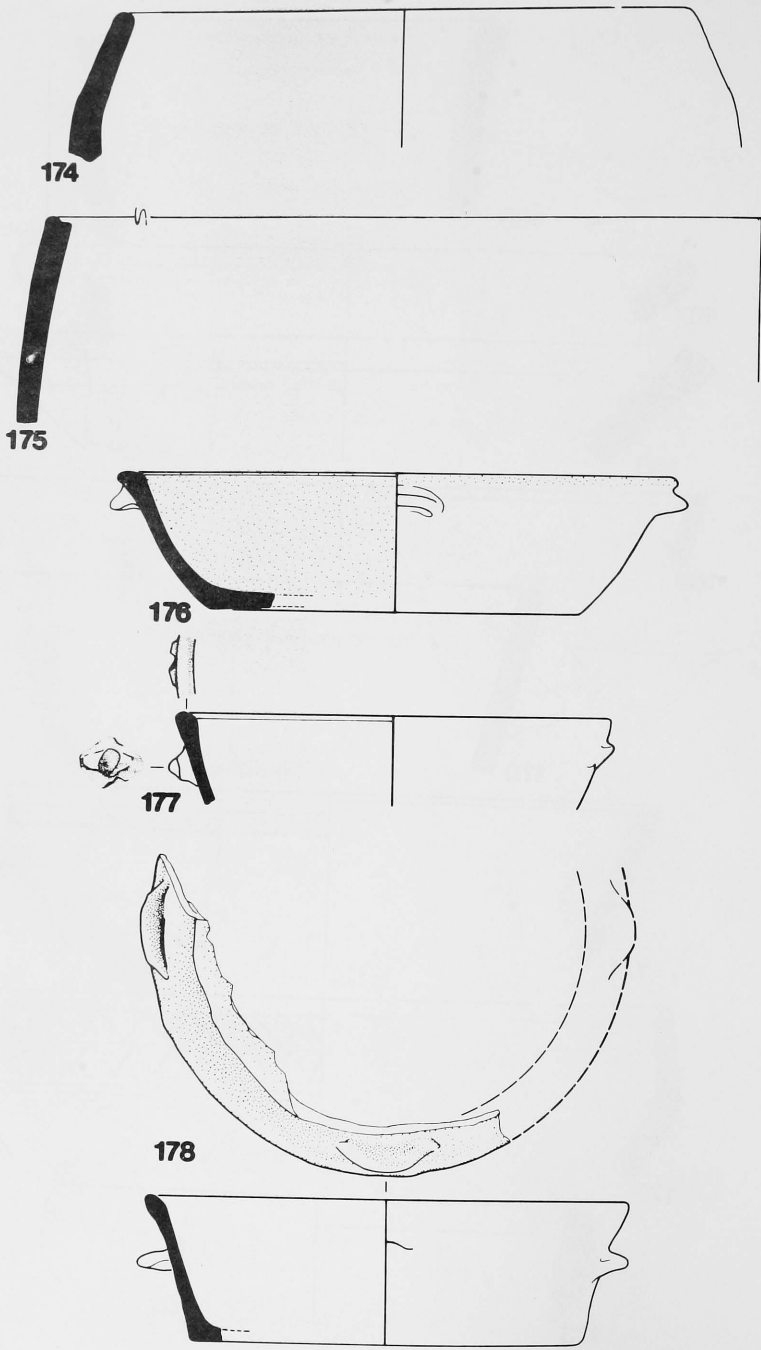


Fig. 69 Unglazed wares (257)

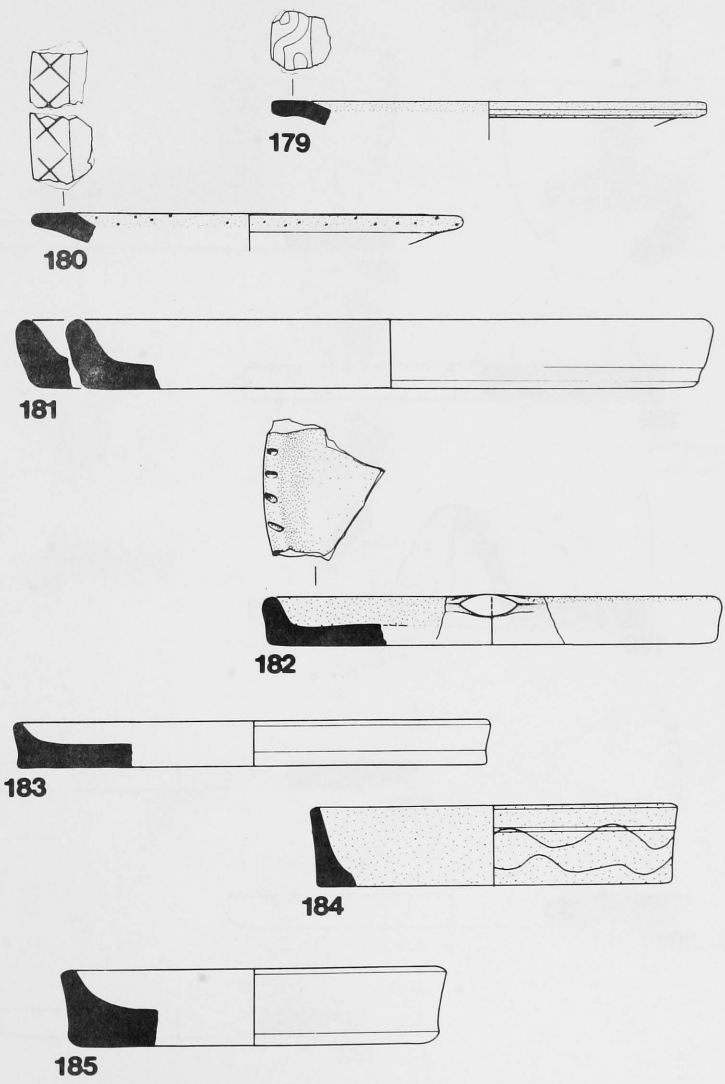


Fig. 70 Unglazed wares (kale)

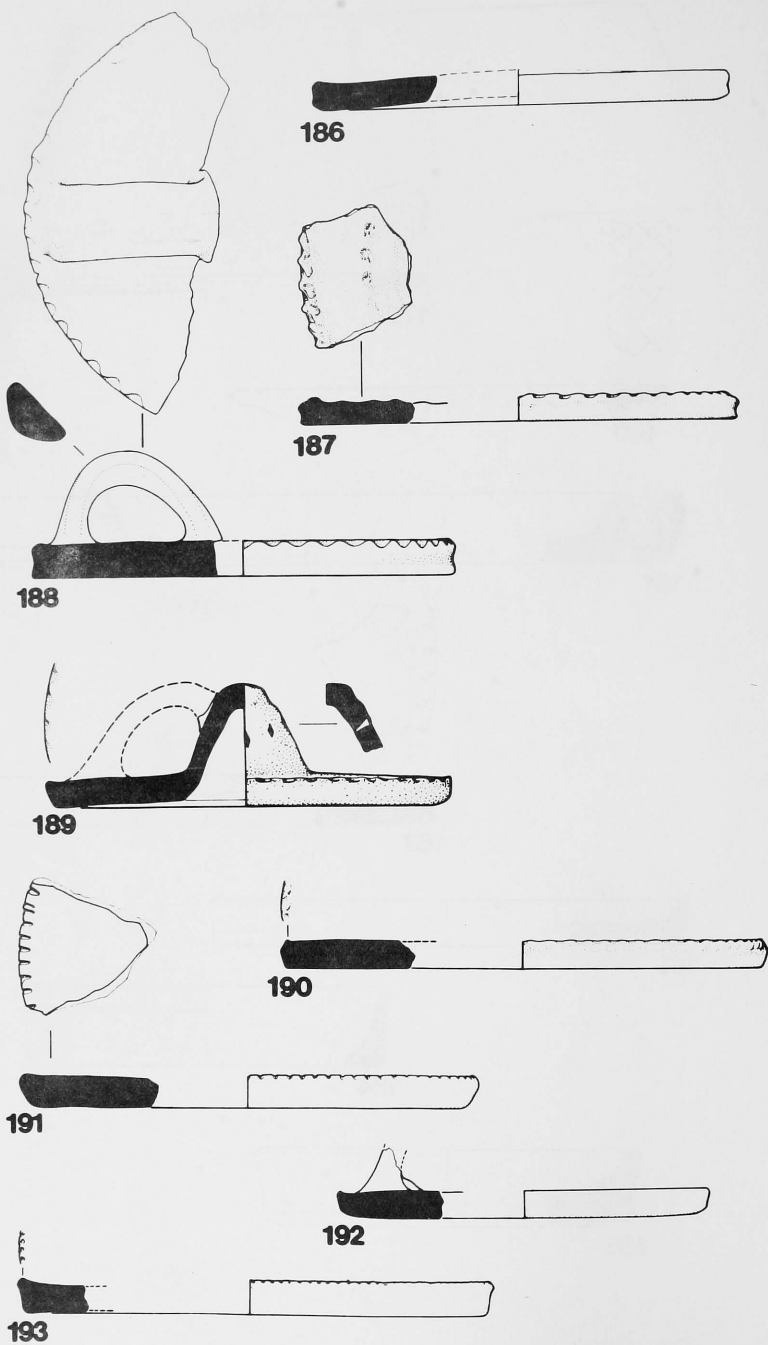


Fig. 71 Unglazed wares (k...)

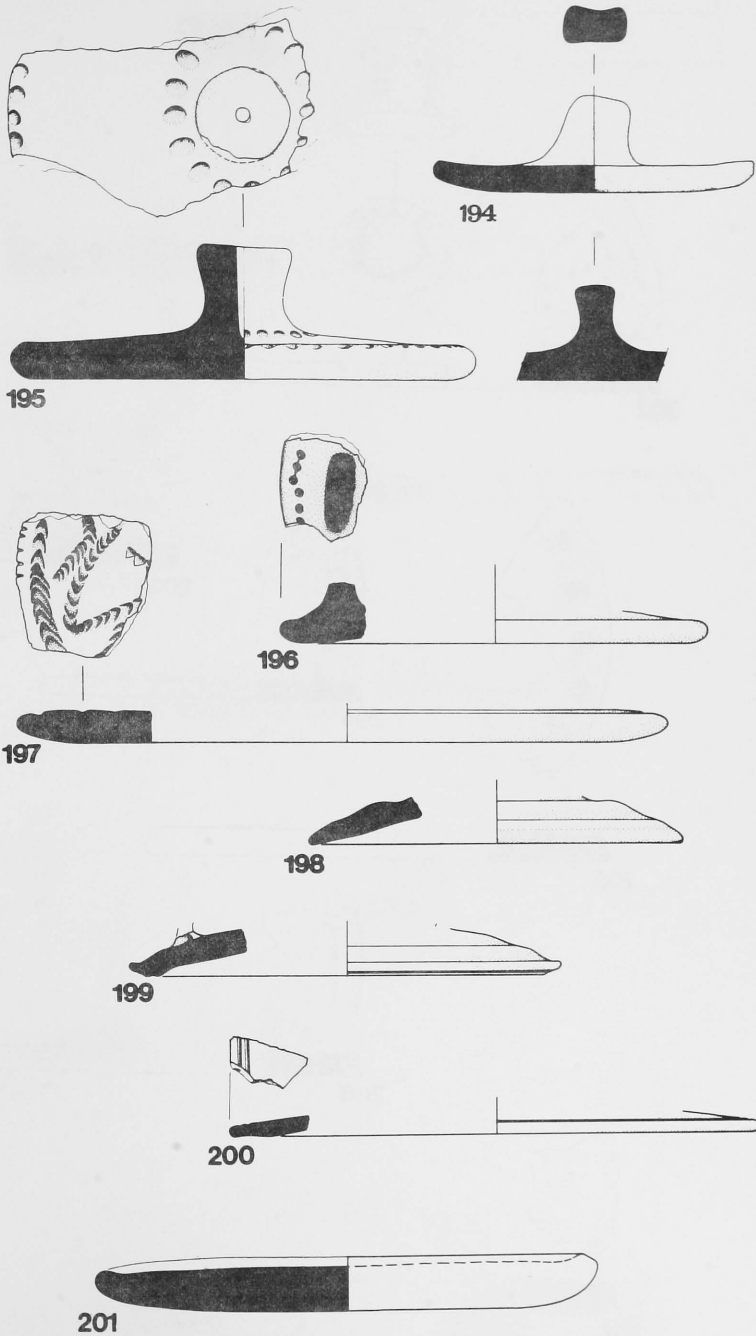


Fig. 72 Unglazed wares (kale)

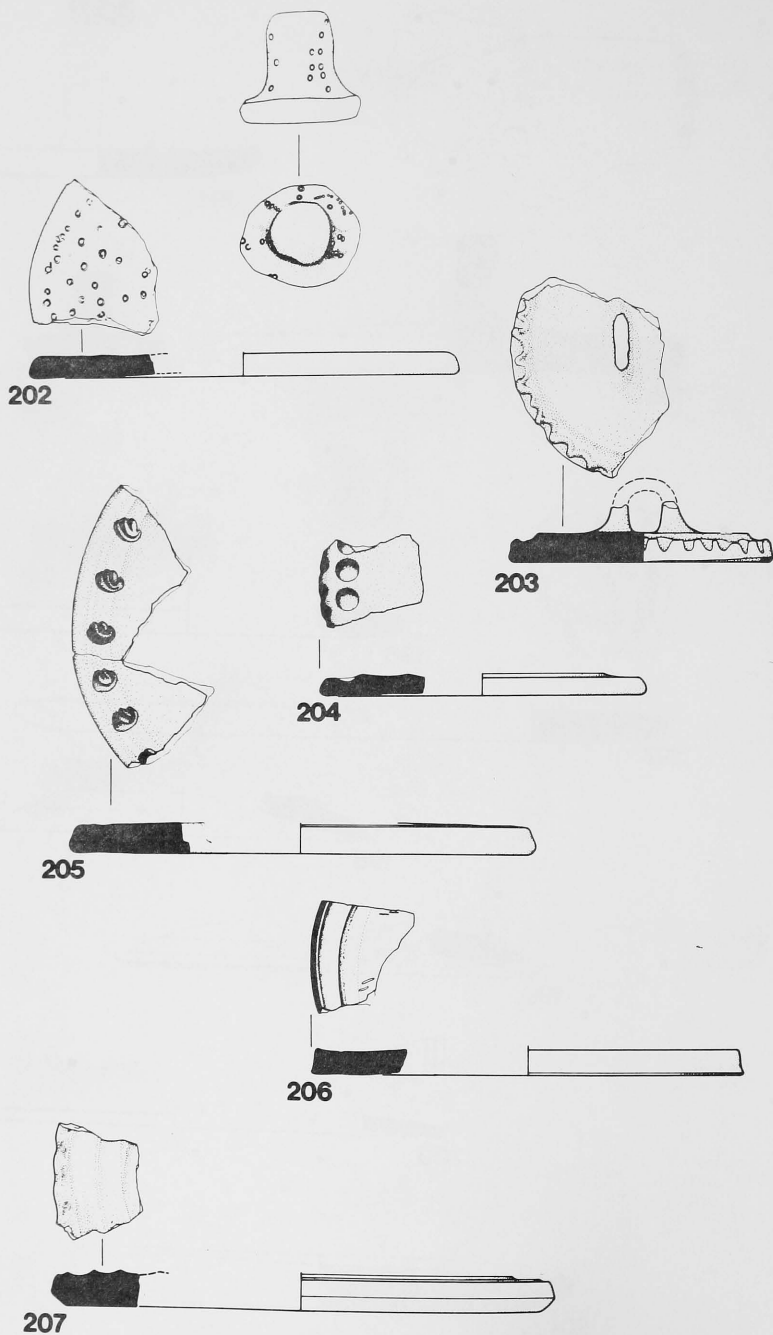


Fig. 73 Unglazed wares

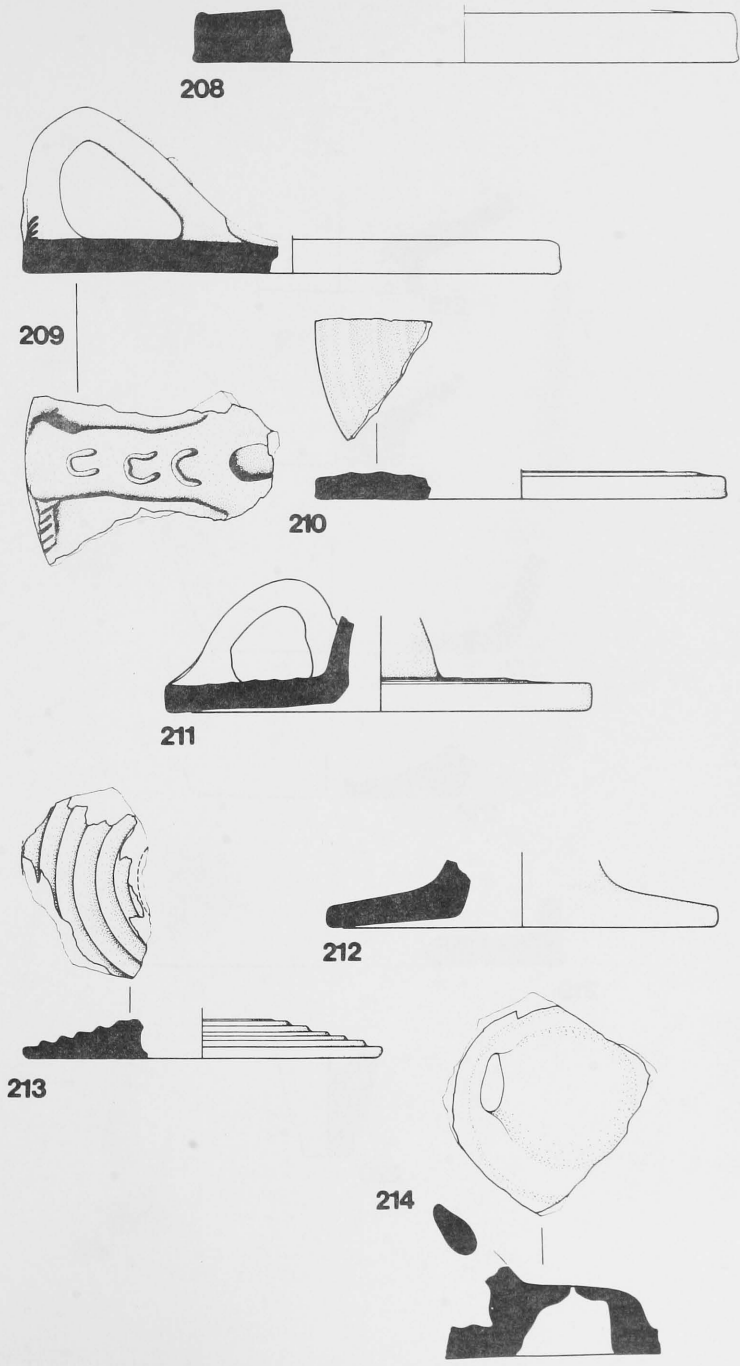
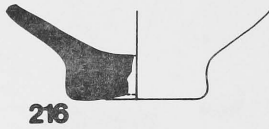


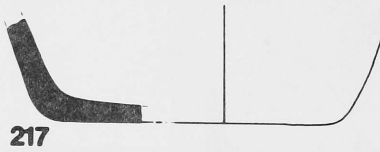
Fig. 74 Unglazed wares (kale)



215



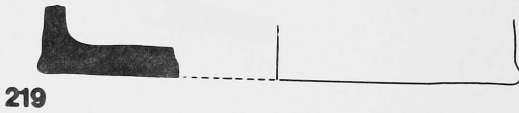
216



217



218

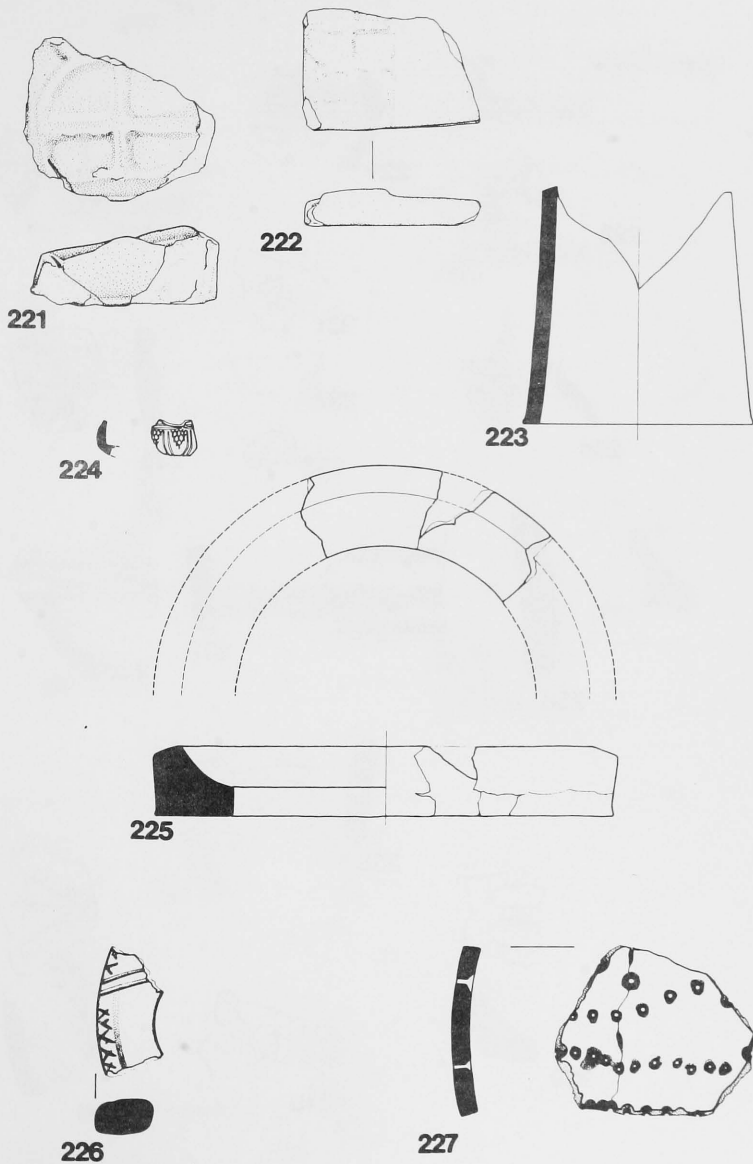


219



220

Fig. 75 Unglazed bases (k



ig. 76 Unglazed wares (kale)

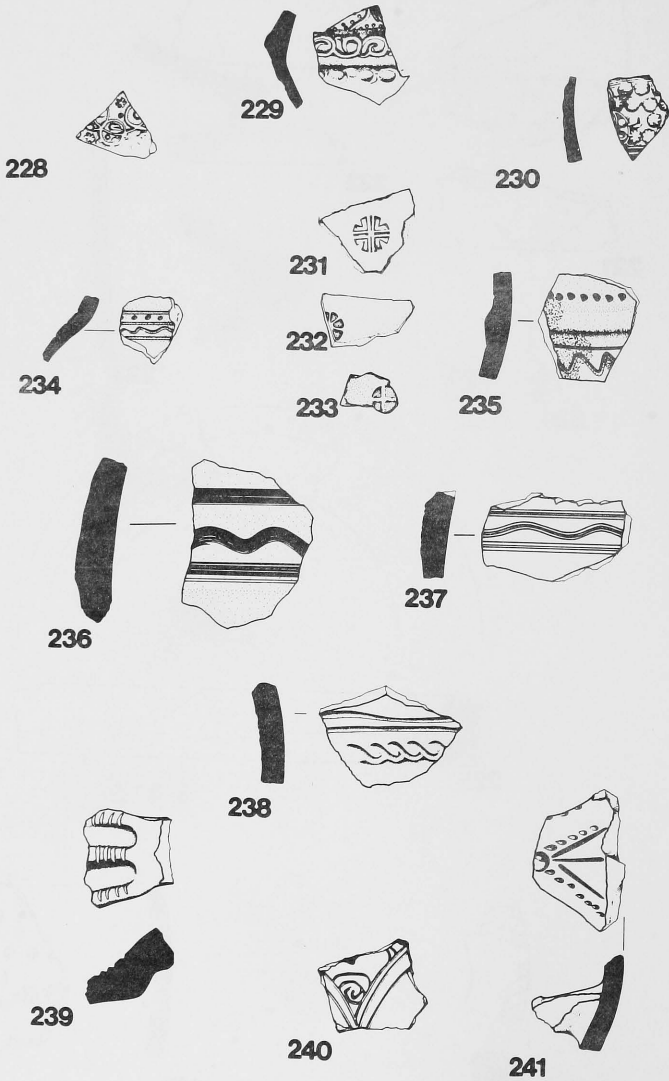


Fig. 77 Moulded, stamped an sherds (kale)

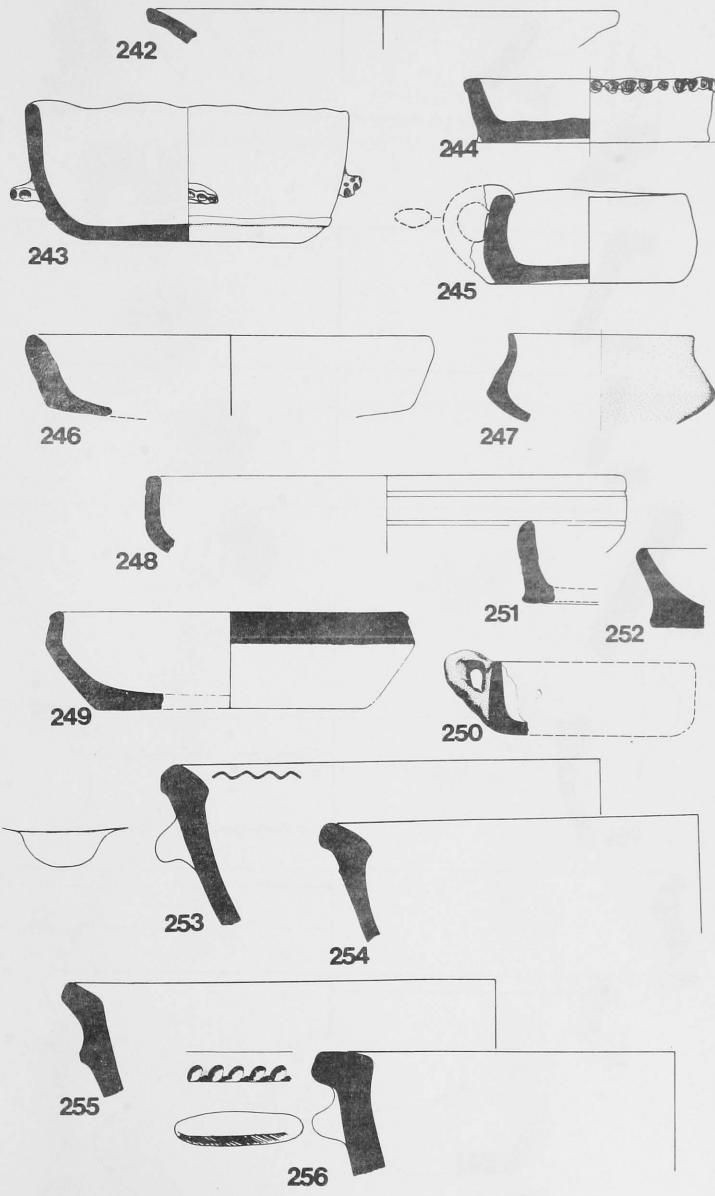


Fig. 78 Unglazed wares (kale)

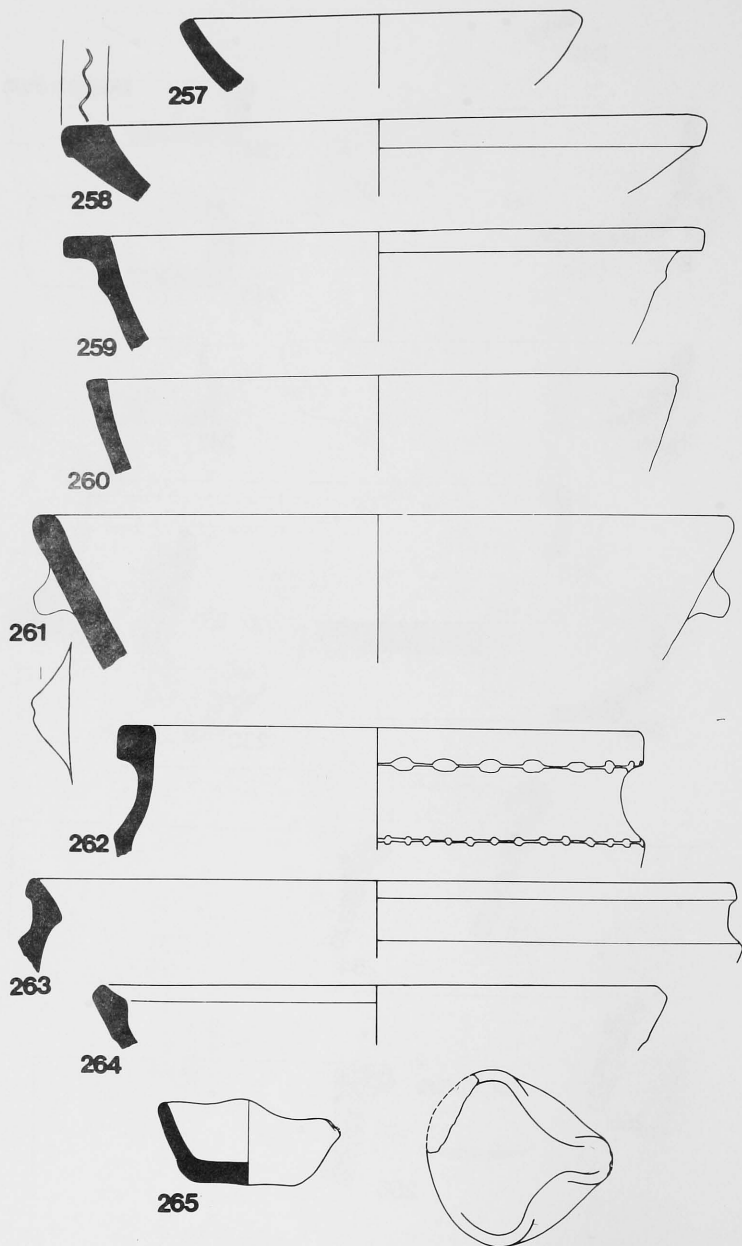
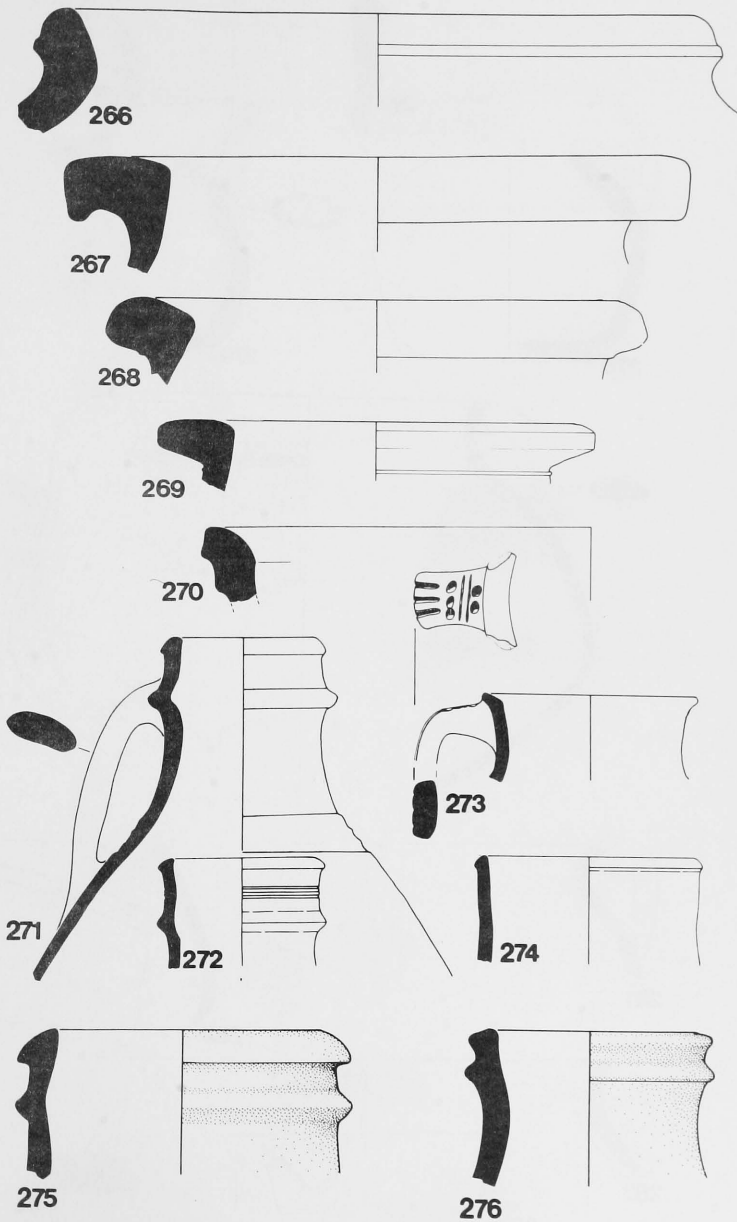


Fig. 79 Unglazed wares (chueca)



g. 80 Unglazed wares (church)

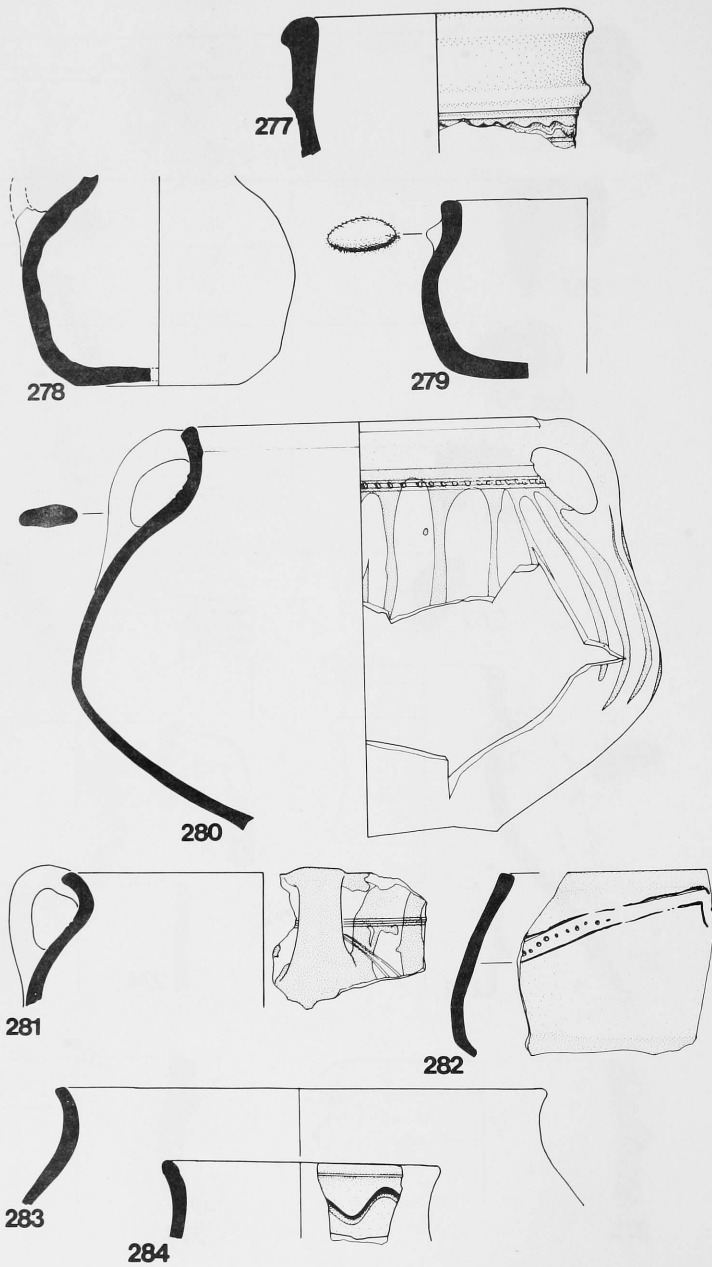


Fig. 81 Unglazed wares (chu

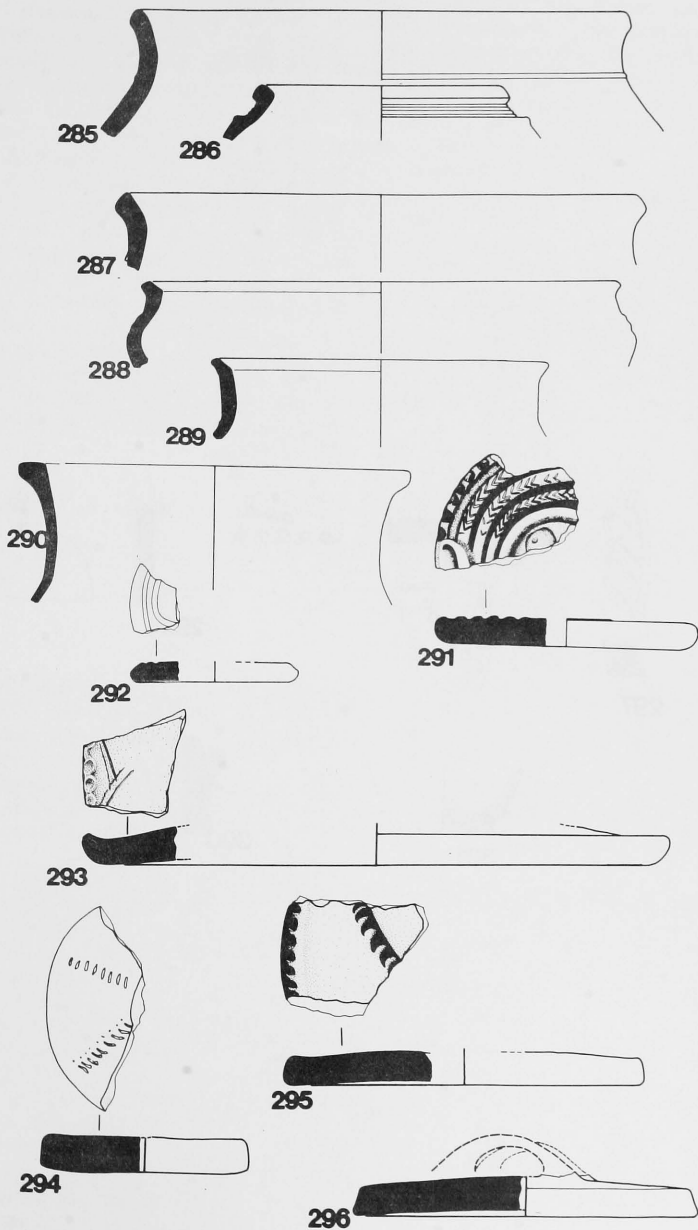


Fig. 82 Unglazed wares (church)

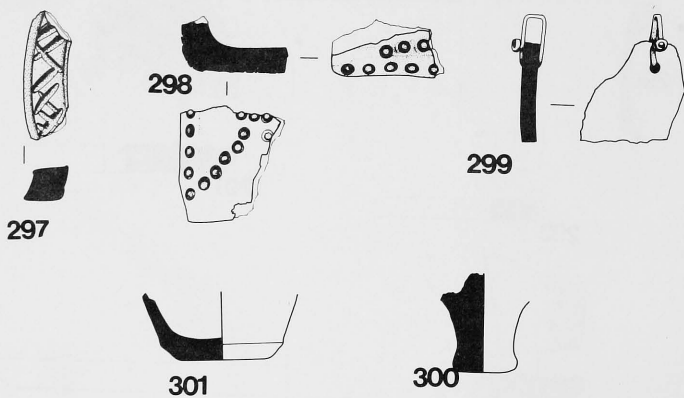


Fig. 83 Unglazed wares; bases (church)

Late hellenistic pottery

Figs 84 and 85 show profiles of sherds of the first century B.C. In general the group is well stratified, though a small number of 'rubbish survivals' from later levels is included. The group is closely paralleled by the accurately dated late hellenistic pottery of Aşvan, the hellenistic settlement of which has a precise end date of 66/5 B.C. (Mitchell 1980: 10-12). Further afield, pottery comparable to the Taşkun Kale repertoire has been found in hellenistic strata of many Eastern Mediterranean sites. The most frequently cited groups come from the major sites of Tarsus (Jones 1950), Antioch-on-the-Orontes (Waagé 1948) and Samaria-Sebaste (Kenyon 1957). The merits of the ceramic groups from these and other sites are critically assessed by Lapp (1961: 57-136). Although a considerable quantity of new material has been excavated during the subsequent twenty years, and although recently excavated sites in Palestine and Transjordan offer possibilities of chronological refinement (e.g. Tel Anafa - Weinberg 1971; Pella of the Decapolis - McNicoll et al. 1982), Lapp's synthesis remains indispensable. But all such material is secondary to the Aşvan corpus for dating the Taşkun hellenistic. Among the parallels we note the following:

TK Fig. 84, 1	cf. Aşv.	131
2		331
3		287
4		117-8
6		163
7		165
8		463
9		320
10		164 etc.

Needless to say, at each site there are forms unparalleled at the other, but the degree of correlation is sufficiently high to be confident that the groups coincide or at least overlap, chronologically. I have suggested above (p. 47) that Taşkun may have continued to be used after the sack of hellenistic Aşvan, but that suggestion is based on the slightest of evidence. A few fragments of pottery could as well belong in the early 1st century A.D. as the 1st century B.C.

Among the late hellenistic shapes bowls with incurving or more or less upright walls (02) predominate (fig. 84). No complete profile was found, and whilst two kinds of bowl base, ring and disc, are possible, the Aşvan analogies suggest that ring bases, such as fig. 85, 25 and 27, were preferred in this region. The finer bowls are made of a well levigated fabric with fired colours between Munsell 2.5YR and 10YR. This wide range makes one hesitate to subdivide the group into imported and local wares. Nor is the surface treatment any indication in this respect. Slips vary from a glossy red in the 10R range to a muddy dull brown (10YR 4/1) or black (10YR 3/2), and occur haphazardly across the range of ware colours. The predominance of red over black slips is consonant with the late hellenistic date, but it should be emphasized that burnishing or polishing the fabric without the application of any slip is common at Taşkun, as at Aşvan.

The carinated bowl fig. 84, 13, unique at Taşkun, may date as late as the 1st century A.D., although similar carinated forms occur in the Hellenistic II collection at Aşvan (e.g. Aşv. 210-211).

Among the closed shapes water jars (C2 - fig. 85, 30-37) predominate. The fabric ranges from fine to coarse, and firing colours also vary.

The absence of storage vessels and storage bowls leads one to suspect that this collection of fragments accumulated during building operations, and represents a limited selection of the late hellenistic repertoire - specifically for eating and drinking from, and for containing drinking water.

The Church Phase I Group

The bulk of the material published in the CP 1 group comes from later contexts, and must be treated with caution. I have put a question mark beside the phasing of most pieces to indicate my own uncertainty. As has been stated above (pp. 36 f.) there were few uncontaminated CP 1 strata, and almost without exception they contained only roof tiles. Thus we may expect that in this group there may be both earlier and later material.

Among the reasonably secure fragments are the following:

Bowls,	fig. 86, 4-5	3rd-4th cents, cf. Pağnik Öreni (Harper, pers. comm.)
Lamp,	fig. 88, 32	5th century or later, cf. Haraba- Oğun 1970: pl. 53,2
Plate,	fig. 86, 12	late 5th - early 6th century, cf. Hayes 1970: 329-338

Among the more dubious pieces are the bowls fig. 86, 1-3 and 6; according to Mitchell (pers. comm.) these are perfectly acceptable as medieval II at Aşvan, and indeed the use of a thick white painted pattern over a red (burnished) slip (fig. 86, 2 and 6) is found at Taşkun on the KP I vessels fig. 53, 57 and 59. Also doubtful are some of the bases, which may be hellenistic.

All Hellenistic and CP 1 vessels are wheel-made, unless stated otherwise.

Fig. 84 Hellenistic

02 and 03

- | | | | |
|----|--|--------------------------|-------------|
| 1 | CN4398
RD 16 cm.
Fine orange pink ware (5YR 6/6), glossy self slip (5YR 6/8) i. and o. Wall curves slightly up to simple rounded rim. | Hell. P | K21 103.13 |
| 2. | CN4399
RD 16 cm.
Fine orange pink ware (5YR 6/6), orange to pink slip i. and o. (various readings in 5YR range). Shape as 1 above, with more curve. | Hell. P | K21 103.13 |
| 3 | CN4396
RD 13.5 cm.
Fine pinky buff ware (2.5YR 6/4), matt red slip (10R 5/4) i. and o. Curving wall, simple upright rounded rim. Two fragments. | Hell. P | K21 103.12 |
| 4 | CN4397
RD 12 cm.
Fine pinky buff ware (2.5YR 6/4), matt red slip (10R 5/4) i. and o. Wall curves up to slightly inclined simple rounded rim. Slight ridging on body o. Two fragments. | Hell. P | K21 103.12 |
| 5 | CN4393
RD 12 cm.
Chalky buff ware (2.5YR 6/4), matt red slip (10R 5/4) i. and o. Shape as 4, above. | Hell. P | K21 103.12 |
| 6 | CN4377
RD 14 cm.
Fine light buff ware (10YR 7/3), black slip (10YR 3/2) i. and o. Incurving wall thickening to simple rounded inclined rim.
Parallels: L16 801.2 2 ex. no slip | Hell. P | H21 1204.13 |
| 7 | CN4400
RD 16 cm.
Fine ware fired pale grey at core, buff (5YR 7/6) at surfaces, slightly darker pink buff (self?) slip. Curving wall, slightly inclined. Simple rounded rim. | Hell. P | K21 103.13 |
| 8 | Cf. CN4379
RD 21 cm.
Medium fine cream ware (7.5YR 7/4) burnished o. Curving wall, thickening below simple rounded inclined rim.
Parallels: L15 801.2 2 ex. one streaky black o.
802.4 | Hell. P (CP 1/2 context) | K21 103.5 |
| 9 | CN4379
RD 22 cm.
Ware and finish as 8, above. Shape also similar, though rim is less markedly inturned. | Hell. P (CP 1/2 context) | K21 103.5 |
| 10 | CN4377
RD 14 cm.
Fine light buff ware, black slip i. and o. Wall curves and thickens slightly below inclined simple round rim.
Parallels: L15 801.2 2 ex. no slip | Hell. P | H21 1204.13 |
| 11 | CN4373
RD 16 cm.
Fine red ware (2.5YR 6/6), glossy burnish (2.5YR 6/8) i. and o. Wall curves up and thickens slightly | Hell. P | H21 1204.12 |

- below simple upright rounded rim.
- 12 CN4391 Hell. P K21 103.12
RD 13 cm.
Fine pink orange ware (2.5YR 6/6), thin self slip (2.5YR 6/8) i. and o. Wall slopes o.; ridge o. below narrow inclined rounded lip.
- 13 CN4372 Hell. P (CP 1/? context) K21 103.6
RD 15.5 cm.
Fine buff ware (10YR 5/4) slip i. and o. fired red at lip, dark brown (10YR 4/1) elsewhere. Lower wall curves outwards at low angle to carination; upper wall, concave in profile, curves up to simple upright rounded rim.
- 14 CN4394 Hell. P K21 103.12
RD 16 cm.
Fine buff ware (2.5YR 6/4), red slip (10R 5/4) i. and o. Wall curves in to upright neck with squarish rim thickened o.
- 15 CN4384 Hell. P K21 103.12
RD 17 cm.
Coarse gritty drab ware, grey at core. Wall sloping out to narrow upright rounded lip.
- 16 CN4332 Hell. P H21 W 1207.5
RD 22 cm.
Coarse buff ware (5YR 6/4), fired self colour with dark patches (5YR 8/1) at surfaces. Wall curves to simple rounded upright rim. Slight ridging o.
- 17 CN4364 Hell. P (CP 1 context) K21 103.9
RD 26 cm.
Coarse gritty ware, completely blackened (7.5YR N3). Wall curves to simple rounded inclined rim.
- 18 CN4381 Hell. P (CP 1/2 context) K21 103.5
RD 25 cm.
Coarse pinky grey ware with white grits, blackened o., pinky brown paint i. and over rim. Wall curves to simple rounded inclined rim.
Parallels: K21 103.13 unpainted, coarse buff ware, blackened in parts
- 19 CN4405 Hell. P K21 103.13
RD 25.5 cm.
Fairly coarse buff ware (7.5YR 6/4), burnished i. and o. Wall curves to upright rim, broadening i. and o. to flat-topped lip.
- 20 CN4383 Hell. P K21 103.12
RD 25 cm.
Coarse gritty drab ware (5YR 5/3). Wall curves up to simple rounded rim; slight ridge below lip o.
- 21 CN4388 Hell. P K21 103.12
RD 20 cm.
Plain creamy ware (10YR 8/4), traces of brown paint in bands o. and on lip. Wall curves to upright rim broadening i. and o. to flat-topped lip.

Fig. 85 Hellenistic

03 bases

- 22 CN4310 Hell. P ? H21 W 1207.4
RD 22 cm.
Medium coarse brown ware with white grits (5YR 5/4). Bulbous body, short neck, outturned rim with rounded lip.
- 23 CN4354 Hell. P (CP 2 context) K21 103.3
RD 23 cm.
Fine buff ware, orange paint o. and over rim, brown paint i. Wall curves up to everted rim with rounded lip.
- 0 and C bases
- 24 CN4385 Hell. P K21 103.12
ED 7 cm.
Plain putty coloured ware (7.5YR 7/2). Low round-edged ring base.
- 25 CN4386 Hell. P K21 103.12
ED 4.5 cm.
Fine pink orange ware (5YR 6/4), pinkish paint i., and a drop or two o. Small ring base of a large vessel.
- 26 CN4236 Hell. P ? H21 1202.13
ED 9 cm.
Coarse buff ware. Red paint i. Low round-edged ring base.
Parallels: L15 802.3 5YR 8/4 - no red paint

- 27 No CN no. Hell. P (CP 1/3 context) K21 101.15
 BD 4 cm.
 Small sharply modelled ring base.
 Previously published: French et al. 1972: pl. 37, no. 23.
- 28 CN4374 Hell. P H21 1204.16
 BD 4.5 cm.
 Well levigated red ware (2.5YR 5/6) fired hard. Red paint o. (10R 3/6), and dribbles i. Base o. reserved. Disc base.
- 29 CN4324 Hell. P (surface) Church area, surface
 BD 8 cm.
 Well levigated pale ware. Red slip. Slightly splayed ring base.
- C2
- 30 CN4390 Hell. P K21 103.12
 RD 7 cm.
 Coarse buff ware (5YR 7/4) firing pink at surfaces. Neck of vessel, wall curves out to simple rounded rim.
- 31 CN4392 Hell. P K21 103.12
 RD 6 cm.
 Fine buff red ware (5YR 7/4-8/4), red brown slip (10R 5/4). Upright neck, rim thickened o.
- 32 CN4375 Hell. P ? K21 103.10
 RD 8 cm.
 Fine well levigated buff ware (5YR 6/4), red brown paint i. and o. (10R 4/4). Wall curves in to short upright neck, rim thickened o.
- 33 CN4402 Hell. P K21 103.13
 RD 14.5 cm.
 Harsh gritty pink ware (2.5YR 6/6). Neck outsloping to triangular rim.
- 34 CN4401 Hell. P K21 103.13
 RD 12 cm.
 Fine buff pink ware with grits (2.5YR 6/6), red brown paint on top of rim with splashes o. (10R 4/4). Upright neck curving o. slightly to rim, everted, with slight overhang and flat top.
- 35 CN4376 Hell. P ? K21 103.10
 RD 12 cm.
 Close buff ware (5YR 6/6 at core) firing 7.5YR 7/4-8/4 at surfaces. Body slopes in to short outward curving neck with rounded rim.
 Parallels: K21 103.12
- 36 CN4404 Hell. P K21 103.13
 RD 12 cm.
 Creamy ware (7.5YR 7/2-8/2). Possibly originally red slipped. Wall slopes in to short outward-sloping neck with simple rounded rim.
- 37 CN4403 Hell. P (CP 1/2 context) K21 103.6
 RD 9.5 cm.
 Harsh gritty pink ware (2.5YR 6/4). Wall slopes in to slightly outward curving neck with rim thickened o.
- C3
- 38 CN4387 Hell. P K21 103.12
 RD 12.5 cm.
 Close cream ware with grits (core 5YR 7/4-8/4; surfaces 7.5YR 7/4-8/4). Wall slopes in to rounded everted rim.
- C1 or C3
- 39 CN4409 Hell. P H21 W 1209.6
 RD 28 cm.
 Coarse grey black ware with white grits. Swelling body, wall curves in to upright neck with slightly outward curving rounded rim.
- C3
- 40 CN4382 Hell. P K21 103.12
 RD 18 cm.
 Coarse drab micaceous ware with white grits (5YR 5/2), blackened in places. Two fragments. Bulbous body. Wall curves in to short neck with slightly outturned rim with angled lip. Two strap handles from rim to upper body.
- Fig. 88 CP 1 and CP 1 (?)
- O2
- 1 CN4177 CP 17 (CP 2/3 context) H21 1201.5
 RD 28 cm.
 Orange ware (5YR 6/4) burnished self slip i. and o. to shoulder. Wall curves out to carination, then in slightly to simple rim bevelled i. Four incised lines, two straight, two wavy below rim o.
 Parallels: H22 1603.4

- | | | | |
|----|---|------------------------|--------------|
| 2 | CN4313
RD 24 cm.
Fairly well levigated buff ware (5YR 7/4), darker buff slip i. and o. with white painted criss-cross lines above carination. Shape as previous, but rounded lip. | CP 1? (CP 2 context) | H22 1602.7 |
| 3 | CN4228
RD 22 cm.
Gritty red ware (5YR 6/6). Lower wall curves out to carination, upper wall slopes in slightly to simple rim.
Parallels: H22 1601.2 3 ex.
Q10 E 1801.3
R12 1903.1
1903.2 | CP 1? (CP 2 context) | H21 1303.5 |
| 4 | CN4019
RD 22 cm.
Fine pink ware (5YR 7/4-8/4), red paint i. and o. (2.5YR 5/6). Upper wall of bowl, sloping inward slightly to simple rounded rim. Two horizontal grooves below rim o. | CP 1? (CP 2 context) | J22 702.2 |
| 5 | CN4170
RD 15 cm.
Fine pink ware, red painted and burnished i. and o. Shape as previous, but smaller. | CP 1? (CP 2/3 context) | H22 1202.2 |
| 6 | CN4220
RD 25 cm.
Well levigated light orange ware (5YR 7/4-8/4), thick glossy red slip i. and o. (2.5YR 5/6) with white painted dots and lines o. Shape as previous, but only one groove. | CP 1? (CP 2 context) | J21 W 1001.9 |
| 7 | CN4297
RD 20 cm.
Coarse brown ware with white grits (5YR 3/1-4/1). Lower wall curves out to carination, upper wall slopes slightly outwards to simple rounded rim.
Parallels: H22 1601.6 red paint i. and o.
1602.7
K21 103.1 red paint i. and o.
R9 1404.1 smoothed surfaces i. and o. | CP 1? (CP 2 context) | H22 1603.4 |
| 8 | CN4329
RD 13 cm.
Fine pink ware, glossy red slip i. and over rim. Wall slopes out slightly to simple rounded rim thickened slightly o. | CP 1? (CP 2 context) | H22 1604.1 |
| 9 | CN4230
RD 26 cm.
No data on ware. Wall curves out then in slightly to rounded rim thickened marked i. and slightly o. | CP 1? (CP 2/3 context) | H22 1203.5 |
| 10 | CN4171
RD 20 cm.
Gritty buff pink ware (5YR 7/3-8/3), purple red paint i. and o. to shoulder. Wall curves up and inclines to rim gently bevelled i. and thickened o. Two horizontal grooves on body o. | CP 1? (CP 2/3 context) | H21 1201.4 |
| 11 | CN4341
RD 17 cm.
No data on ware. Wall curves up to everted rim roughly triangular in section. | CP 1? (CP 2 context) | K21 103.1 |
| 12 | CN4324
RD approx. 26 cm.
Fine ware, red slip i. and o. Wall slopes out to upright rim with rounded lip and pronounced ridge at base of rim o. | CP 1 (surface) | Church area |
| 13 | CN4200
RD 26 cm.
Fairly fine buff ware (5YR 7/6), thick glossy red slip i. and o. (10R 5/6). Wall slopes out to down-turned rim with rounded lip.
Parallels: H21 1202.1 | CP 1? (CP 2/3 context) | H21 1201.3 |
| 14 | CN4149
RD 24 cm.
Harsh red ware (5YR 7/6), red paint i. and o. Oblique wall curves upwards to broad flat rim with rounded lip. | CP 1? (CP 2 context) | J21 W 1002.1 |
- Fig. 87 CP 1 and CP 1 (?)
- 03
- | | | | |
|----|---|------------------------|-------------|
| 15 | CN4281
RD approx. 43 cm.
Coarse brown ware with white grits. Wall curves up to massive everted rim with broad bevelled lip. Curved ledge handle. Short slashes on handle and rim. | CP 1? (CP 2/3 context) | H21 1202.14 |
|----|---|------------------------|-------------|

16	CN4174 RD 34 cm. Wall slopes o. to round rim thickened i. and o. Rim bevelled i.	CP 1? (CP 2/3 context)	H21 1201.4
17	CN4167 RD 34 cm. Wall slopes out to rim thickened i.	CP 1? (CP 2/3 context)	H21 1202.2
18	CN4162 RD 34 cm. Light brown pink gritty ware. Wall slopes out and up to everted rim. Slight ridge below rim o. Parallels: R15 2001.2	CP 1? (CP 2/3 context)	H21 1201.2
19	CN4369 RD 20 cm. Medium coarse pinky buff ware (5YR 7/6), fired buff i. (5YR 6/4). Wall curves up to simple square rim.	CP 1? (CP 1/2 context)	K21 103.6
20	CN4235 RD 24 cm. Coarse brown ware with white inclusions. Outward sloping wall, thickened rim flat on top. Broad diagonal slashes on ridges on rim and body o.	CP 1? (CP 2/3 context)	H21 1202.13
04			
21	CN4242 RD 21 cm. Brown gritty ware, fired black i. Hand made. Flat base, rising slightly to ridge o., wall sloping out to rounded rim. Irregular meandering incised line.	CP 1? (CP 2/3 context)	H21 1202.13
02			
22	CN4158 RD 8 cm. Orange grey ware. Upright neck, rim thickened o., lip rounded.	CP 1? (CP 2/3 context)	H21 1201.2
23	CN4260 RD 8 cm. Gritty red ware. Wall curves in to neck, then slightly o. to simple upright rounded rim. Red paint o.	CP 1? (CP 2 context)	H22 1601.5
24	CN4380 RD 11.5 cm. Well levigated cream ware (5YR 8/4). Neck wall slopes slightly inward, rounded everted rim.	CP 1? (CP 1/2 context)	K21 103.5
25	CN4336 RD 10 cm. Shape as no. 23. Strap handle with protrusion or 'kick' springs from rim.	CP 1	H21 W 1208.5
26	CN4159 RD 8 cm. Gritty pink ware. Neck wall slopes gently outward, slightly everted rounded rim, swelling below rim.	CP 1? (CP 2/3 context)	H21 1201.2
27	CN4371 RD 8 cm. Gritty red ware. Wall curves in to neck, then slightly o. to simple upright rounded rim. Red paint o.	CP 1? (CP 2 context)	H22 1601.5
24	CN4380 RD 11.5 cm. Well levigated cream ware (5YR 8/4). Neck wall slopes slightly inward, rounded everted rim.	CP 1? (CP 1/2 context)	K21 103.5
25	CN4336 RD 10 cm. Shape as no. 23. Strap handle with protrusion or 'kick' springs from rim.	CP 1	H21 W 1208.5
26	CN4159 RD 8 cm. Gritty pink ware. Neck wall slopes gently outward, slightly everted rounded rim, swelling below rim.	CP 1? (CP 2/3 context)	H21 1201.2
27	CN4371 RD 10 cm. Well levigated orange ware. Neck wall slopes o. to rim ridged o. with rounded lip. Broad strap handle from rim, with 'kick'.	CP 1? (CP 1/2 context)	K21 103.6
03			
28	CN4157 RD 16 cm. Grey buff ware (5YR 5/4). Wall slopes in to rounded rim thickened o. with slight bevel i. Red paint o. and over rim i. Parallels: H21 1202.1 J21 W 1003.1 S11 201.1	CP 1? (CP 2/3 context)	H21 1201.2

- 29 CN4139 CP 1? (CP 2/3 context) H21 1201.1
 RD 17 cm.
 Fairly fine buff ware (5YR 6/6). Wall curves i., with slight ridging o. Upright narrow rounded rim.
- Fig. 88 CP 1 and CP 1 (?)
- C3
- 30 CN4160 CP 1? (CP 2/3 context) H21 1202.2
 RD 22 cm.
 Gritty buff ware. Holemouth vessel. Thick wall slopes in to simple lip.
 Parallels: R10 1302.1
 S8 1501.1
- 31 CN4370 CP 1? (CP 2 context) K21 103.6
 RD 20 cm.
 Medium coarse pinky buff ware, buff i. (5YR 6/4) and pink o. (5YR 7/6). Wall curves inward to squarish rim thickened i. and slightly bevelled. Six parallel incised grooves o., two below rim and four lower down.
- C5
- 32 CN4360 CP 1 Area H
 L 9.7 cm., W 7 cm.
 Fairly fine putty coloured ware, blackened. Top only of mould made lamp with filler hole and nozzle. Impressed design of lines and slashes, and vestigial knob handle.
- O and C bases
- 33 CN 4221 Hell/CP 1? (CP 2 context) J21 W 1001.7
 BD 4.5 cm.
 Fine buff clay, brown to black slip i. and o. Ring base with rounded foot, outward swelling wall.
- 34 CN4304 Hell/CP 1? (CP 2/3 context) H21 1202.13
 ED 3.5 cm.
 Fine well levigated red ware, polished o. Ring base, outer edge and foot with right angle junction, inner edge curving in. Outward swelling wall.
- 35 CN4294 Hell/CP 1? (CP 2/3 context) H21 1202.20
 BD 9 cm.
 Fairly fine buff ware (7.5YR 6/4-7/4), red paint i. High ring base, foot splayed and rounded.
- 36 CN4270 Hell/CP 1? (CP 2 context) H22 1602.2
 ED 9.5 cm.
 Fairly fine buff ware (7.5YR 6/4-7/4), traces of red paint i. High ring base, splayed and rounded foot, swelling o.
- O4
- 37 CN4257 CP 1? (CP 2/3 context) H22 1603.2
 RD 40 cm.
 Coarse brown ware with gritty white and micaceous inclusions. Flat base with massive raised edge.
- X3
- 38 CN4330 CP 1 H21 1204.9
 Max. dims 35 x 22 cm.
 Coarse pink brown ware. Fragment of a flat tile, thickened edge triangular in section. Channel along one edge; paired parallel finger impressed lines form saltire pattern on upper surface. Scale 1:2
- 39 CN4302 CP 1
 Max. dims approx. 11 x 11 cm.
 Coarse pink brown ware. Fragment of a flat tile with thickened edge. Finger-impressed diagonal lines on upper surface.
- 40 No CN no. CP 1 H22 1602.3
 BD 8 cm.
 Coarse ware. Disc base; wall swells outwards.

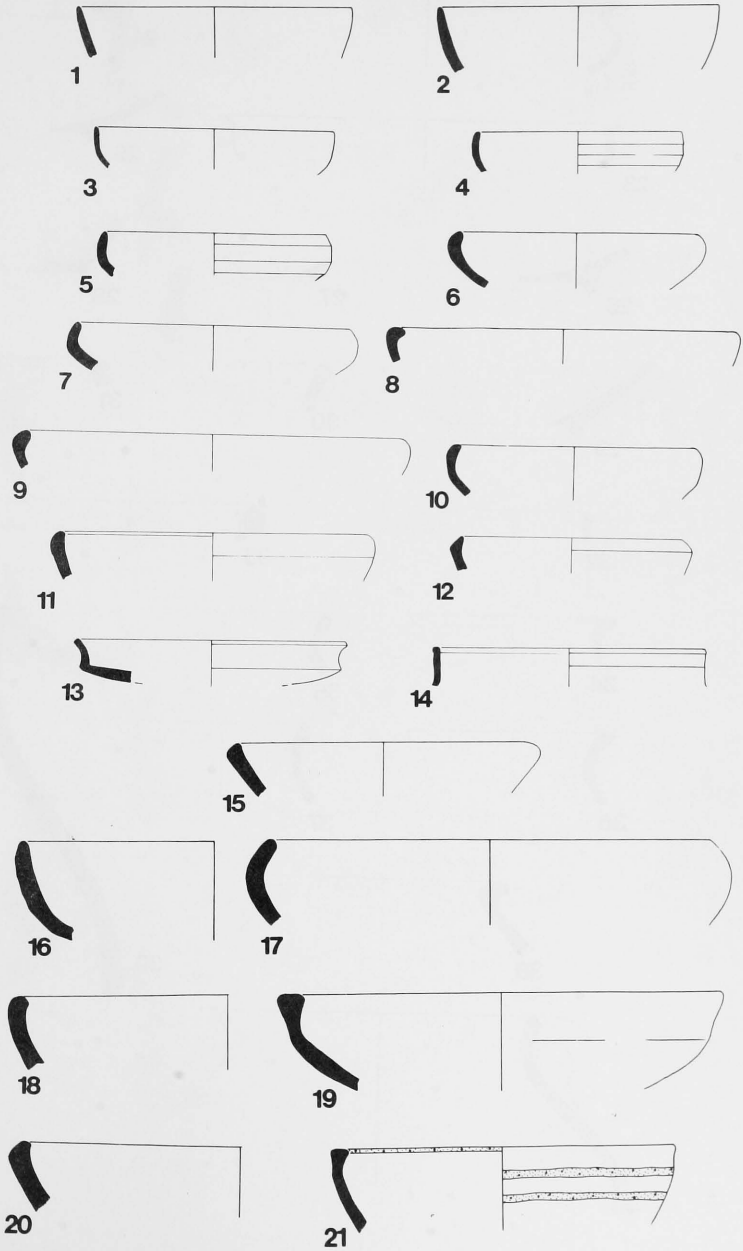


Fig. 84 Hellenistic

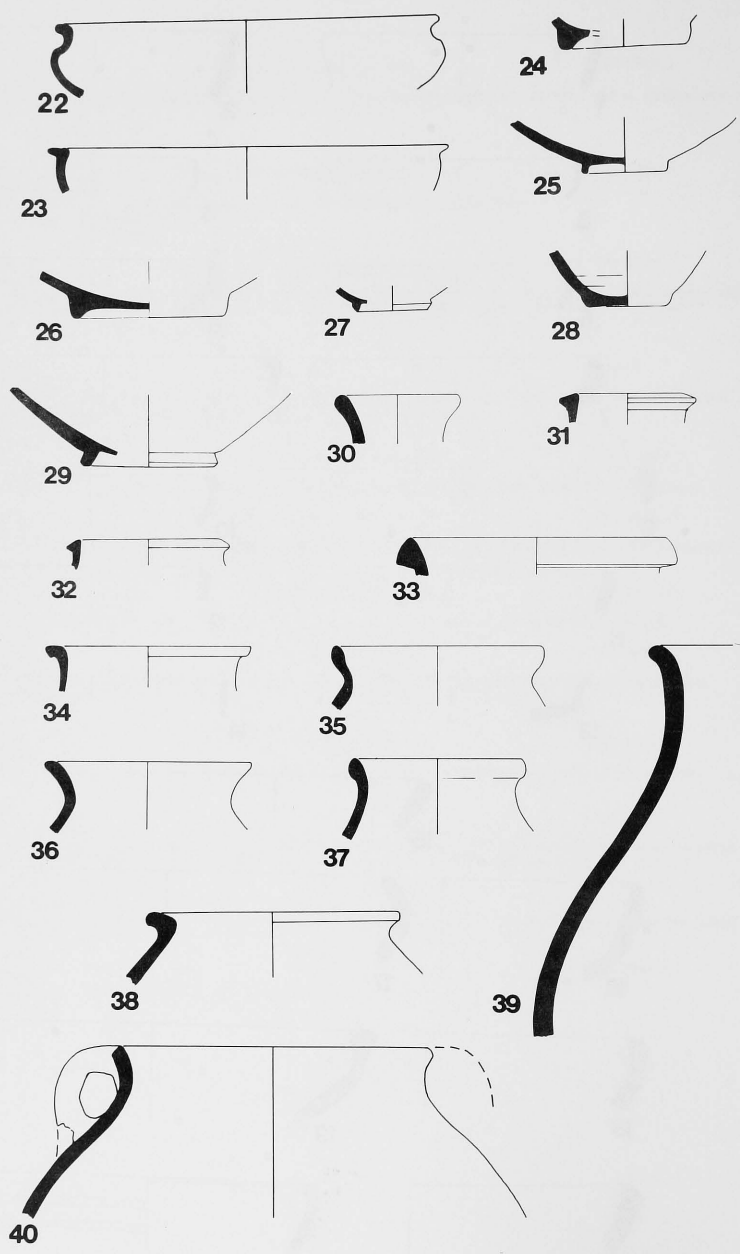


Fig. 85 Hellenistic

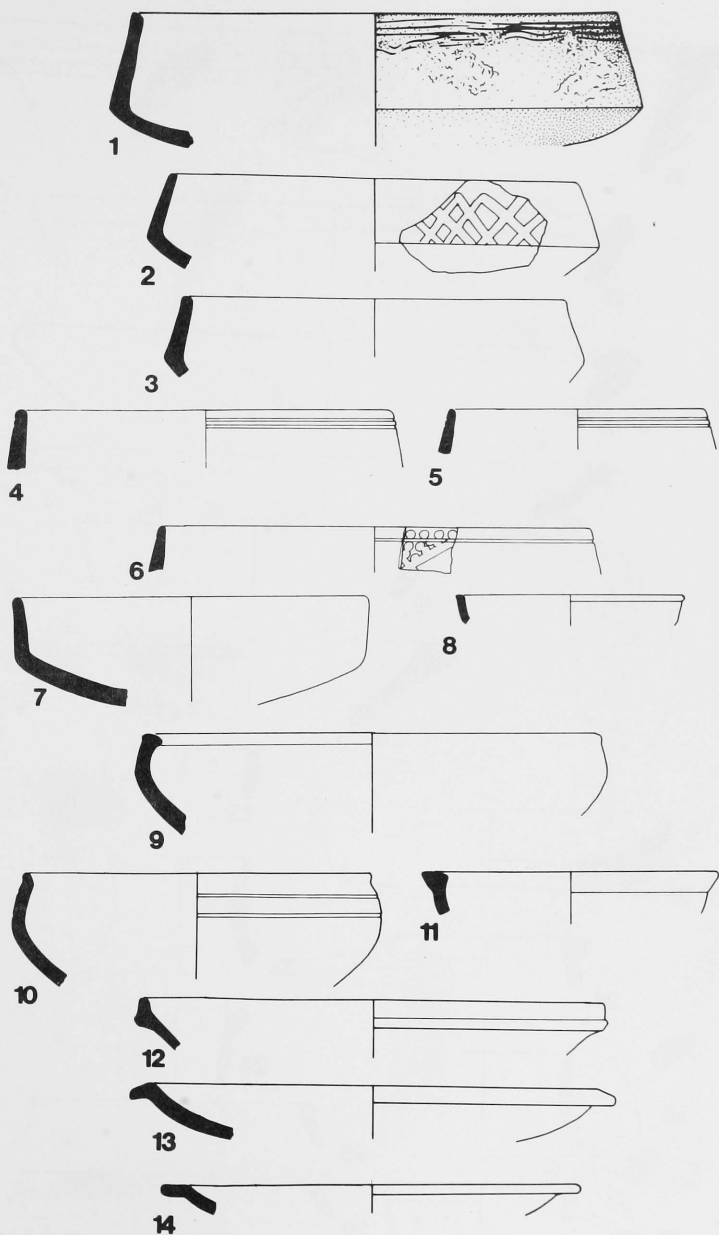


Fig. 86 CP 1 and CP 1 (?)

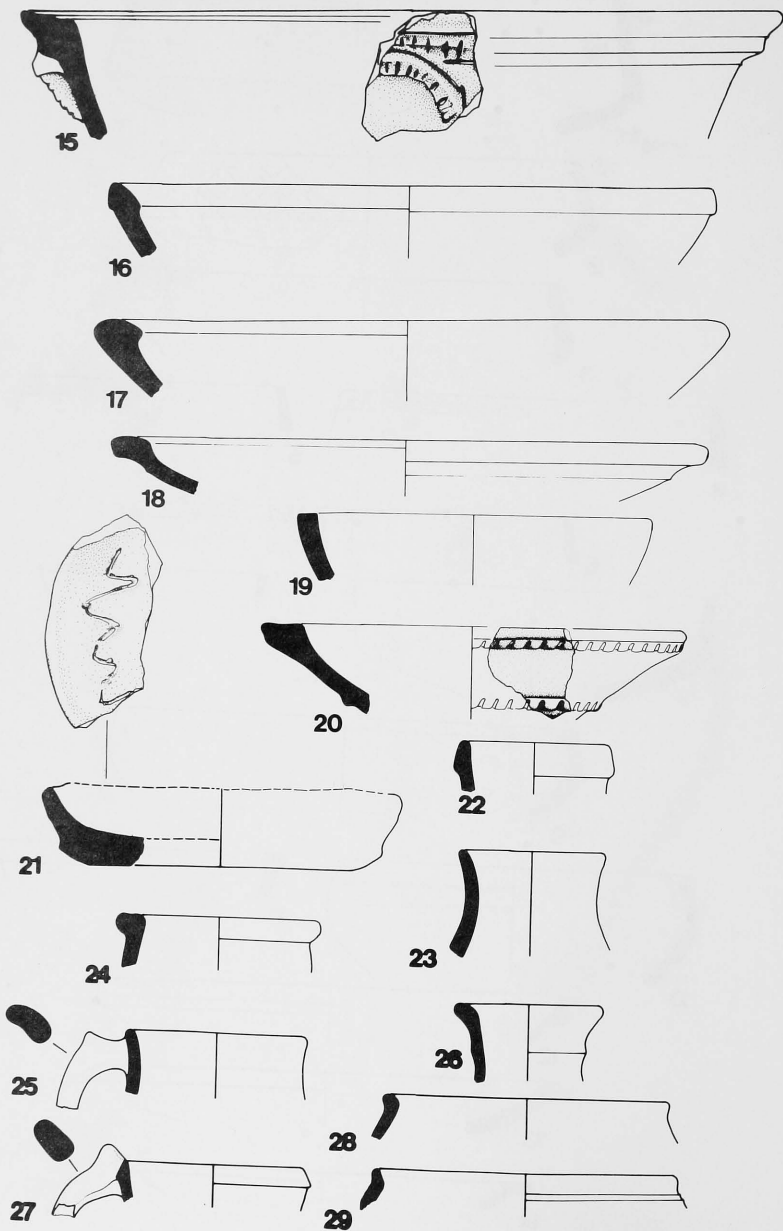


Fig. 87 CP 1 and CP 1 (?)

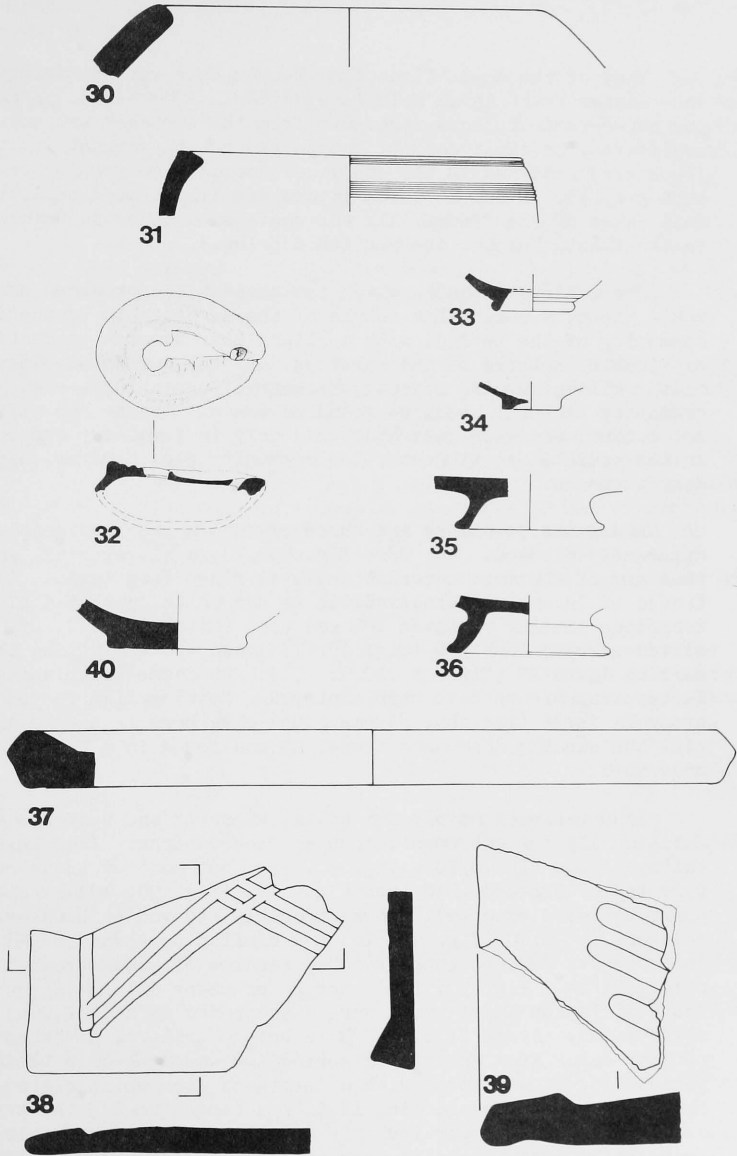


Fig. 88 CP 1 and CP 1 (?)

CHAPTER 6

THE SMALL FINDS

Many of the small finds from Taşkun Kale were registered in the same manner as at Aşvan Kale (see Mitchell 1980: 229). A majority of the non-ceramic objects recovered from the trenches was not, however, registered, as their condition appeared not to warrant it. These objects were retained in the study collection; some were drawn and photographed. A few of these pieces are illustrated here, to show the full range of the finds. All the registered objects, which are now in the Elâzığ Museum, are published below.

The medieval objects which the excavations produced were, one would guess, a reasonable sample of the durables to be found in a rural community of the period, with a slight bias towards projectile heads, explicable in terms of the fortress. Of the perishable items - clothes, cloth, kilims, wooden objects, basketry, furnishings, etc. - which the community probably used, we found no trace. Bronze and silver were not common, and were generally used only in jewellery and coinage in the medieval settlement; the community did, however, use iron for many purposes.

Among the jewellery are three pieces in precious metal, albeit apparently alloyed. TK 70/1 (fig. 89, 1), a silver ring, is finer than any of the more numerous medieval rings from Aşvan. Although no traces of inlay were observed, it is not unlikely that a niello technique similar to Aşvan 102 was used (Mitchell 1980: 252). The silver earring TK 71/40 (fig. 89, 7) looks extremely like the gold earring Aşvan 93 (Mitchell 1980: 251); the same technique of manufacture appears to have been employed. Nothing like the pectoral cross TK 71/35 (fig. 89, 8) was found elsewhere in the Aşvan project. Like the earring discussed above, it was found in a Christian graveyard.

Iron was used mainly for tools, utensils and weapons, and possibly occasionally for adornment, such as finger-rings. Iron knives were fairly common (TK 70/18 - fig. 90, 15), but most of those recovered were badly corroded (S10 trench no. 25, (fig. 90, 19) is shown as a characteristic example). These probably had wooden handles. The scissors TK 70/10 (fig. 90, 16) are similar to Aşvan 36 (Mitchell 1980: 245); perhaps these too had handles of wood attached to the metal shanks. Fig. 90, 25-33 are by no means all the arrowheads found at Taşkun Kale; most were as corroded as no. 31, and are not illustrated. Apart from no. 33 (a bronze trilobed arrowhead which perhaps dates from an earlier period and was reused in the medieval period, for it was found with a length of iron which fitted into its haft socket, thus converting it into a tanged head), the arrows were all of iron. It is particularly notable that this group is without large barbs such as can be seen on Aşvan 45, 46 and 47 (Mitchell 1980: 246). It is possible that the barbless heads are for war arrows, the purpose of which was to obtain maximum penetration, whereas the barbed head, probably for hunting, was intended to remain stuck in the quarry along with the shaft in order to impede movement.

By comparison with Aşvan, beads were uncommon at Taşkun (fig. 91, 34-39). All the Taşkun examples were found singly, mostly in the graveyard. The predominance of blue faience or frit (indicative of an amuletic or prophylactic function?) contrasts with Aşvan, where all the beads were stone or glass.

Glass vessels seem to have been little used at Taşkun. The goblet or hanging lamp TK 73/79 (fig. 91, 44) dates to about the 4th or 5th century; it was part of the church apparatus and is unique at Taşkun. For the unguentaria TK 73/46-8 (fig. 91, 45-7) I have found no parallels. A similar flaring neck and collar can be seen on a 14th or 15th century piece in the Benaki Museum (Clairmont 1977: pl. XXIII), but the body of this piece is bulbous. Moreover, the neck and collar shape occurs on vessels of earlier periods. Glass was also used in bracelets; one fragment, in twisted strands of black glass, is of much finer workmanship than the example illustrated by Mitchell from Aşvan (1980: 252, no. 105).

A total of twenty-three coins was found at Taşkun Kale. Twenty-one were bronze, one was bronze with a silver wash, and one was silver. Seven of the coins were identified precisely, and four more with reasonable certainty. Of these eleven pieces, two were Byzantine, one Artuqid, and eight Ilkhanid. Obviously using a collection of this size for dating involves risks, but I have chosen to treat the information which they provide as reliable, particularly the evidence of the Mongol coins, which, taken with the broader time-span of the pottery, is decisive in dating the fortress. Seven of the eight Ilkhanid coins were found in the fortress, indicating occupation between about 1300 and 1350 A.D. (above, p. 19).

The two Byzantine coins TK 70/6 and TK 70/15 tie in with the anonymous bronze series of more than a score of coins found at Aşvan (Mitchell 1980: 53-55); with two Taşkun specimens may be considered the Artuqid coin TK 71/39. I have suggested that these may be an indication that the CP 1 church continues in use until the 11th or 12th century: the evidence of just three coins is, it must be emphasized, extremely slight, and may be the result of occupation elsewhere on the site, or even simply casual loss by passersby, herdsmen or cultivators. Into this category falls the Ottoman (?) coin TK 70/9.

Coins of Taşkun Kale

Byzantine

70/6	Constantine VIII and Basil II	989-1028	Thompson 1954:113	AE	J21 301.2
70/15	Michael IV	1034-1041	Thompson 1954:113	AE	S11 203.3

Artuqids of Kaifa and Amid

70/39	Nur al-Din Mohamad	1174-85	Poolle 1877:127	AE	L15 801.3
-------	--------------------	---------	-----------------	----	-----------

Ilkhanids

71/55	?Ūljaītu	1304-16	Poole 1881:55-60	AE	R11 602.5
73/72	?Ūljaītu	1304-17		AE	R9 1400.3
71/37	Abū Sa'id	1316-35	Poole 1881:88-93	AR	R11 601.8
70/17	Abū Sa'id	1316-35		AE	S11 205.4
71/51	Abū Sa'id	1316-35		AE	S10 501.4
71/52	?Abū Sa'id	1316-36	silver washed	AE	J22 703.10
71/64	?Abū Sa'id	1316-35		AE	R10 1302.7

Ottoman?

70/9				AE	J22 302.2
------	--	--	--	----	-----------

Unidentified with arabic script

71/50				AE	S10 501.3
71/54				AE	J22 703.20
71/56				AE	R11 600.3
71/58				AE	S10 501.3
73/61				AE	R9 1401.1
73/74				AE	Q10 1805.1

Unidentified

71/49				AE	L15 802.1
71/53				AE	J22 701.15
71/57				AE	R11 606.1
70/7				AE	S11 201.4
73/75				AE	T9-11 2101.1
Q9 E trench no. 1				AE	Q9 E 1701.1

Small finds: catalogue

Fig. 89 Jewellery and other metal objects

- | | | | |
|----|---|----------|------------------------|
| 1 | TK 70/1
D 29. cm., Th. 1.9 cm.
Silver alloy (?) ring. Finger-ring with diamond-shaped bezel with raised hemispheroid protrusions at corners. Within bezel a diamond shape with four circular punch marks, surrounded by four S-shaped patterns on annulus. Linear incised decoration on either side of bezel and concentric circles. | KP I | S12 1.1 |
| 2 | TK 70/24
H 2.8 cm., W 2.1 cm.
Bronze pendant. Bronze object consisting of perforated diamond shape attached to a ring shape, which is in turn attached to a perforated rectangle with concave sides and slightly convex base. | Cleaning | S11 200.10 |
| 3 | Trench no. 6
W 2.6 cm., H 2.6 cm.
Iron ring. Ring, purpose uncertain. Damaged. Flat spiralforn joint or bezel, corroded. Possibly a pottery rivet. | KP II | S10 501.4 |
| 4 | Trench no. 6
W 1.7 cm., H 1.0 cm., Th. 0.25 cm.
Iron ring. Rectangular, possibly as a result of damage. A finger ring? | KP I | R11 604.1 |
| 5 | Trench no. 4
Surviving D 1.8 cm., bezel W 0.9 cm.
Fragment of a bronze ring. Finger (signet?) ring, with thick oval bezel on which is an incised design (pseudo-arabic?). | CP 3 | J22 701.2 |
| 6 | TK 73/65
D 1.8 cm.
Bronze ring. Flat section with two conjoined broader areas making up bezel. Depicted as found. | CP 2/3 | H21 1202.16 (Grave 11) |
| 7 | TK 71/40
D 2.5 cm., D of decorative ball 1.2 cm.
Silver alloy (?) earring. Found with skeleton W (grave undefined), which presumably had had pierced ears. Silver wire hoop, hook and eye attachment, strengthened at welded junctions with spherical ball by twisted silver wire. Silver ball ornamented with tiny circlets of spirally twisted silver wire and two twisted strands around circumference. Compare the gold earring Asvan 93 (Mitchell 1980: 239, 251). | CP 2/3 | J22 201.20 (Graves) |
| 8 | TK 71/35
H 4.3 cm., W 3 cm., Th. 0.2 cm.
Silver alloy cross. Pectoral cross, cast, found with skeleton Z (grave undefined). Arms of cross flat at back, rounded at front, hole for suspension at top. At extremities one large and two small hemispheres. | CP 2/3 | J22 201.25 (Graves) |
| 9 | TK 70/20
L 6.5 cm., W 3.6 cm., Th. 0.8 cm.
Bronze arm of cross. Fragmentary arm of a cast bronze maltese cross with diamond-shaped finial at end of arm. Its counterpart has been broken off. Four grooves in arm and three hemispherical hollows in finial. These may have held inlay. | CP 2 | J21 304.2 |
| 10 | TK 70/16
H 3.5 cm., W 2.9 cm.
Fragment of a bronze plaque. Thin bronze plaque with decoration of hammered hemispheres and pendent lines. | CP 2/3 | J21 301.3 |
| 11 | TK 70/14
L 3.9 cm., D 0.3 cm.
Bronze pin or fibula bow. Fragment of pin or fibula with circular section and hemispherical head. | KP II | S11 203.10 |
| 12 | TK 70/unnumbered
(a) D 0.38 cm.
Copper or bronze fragment of a child's bracelet (?) consisting of three strands of wire twisted together.
(b) D 0.25 cm.
Single strand copper or bronze fragment of a child's bracelet (?). | CP 2 | J21 303.5 |
| 13 | TK 70/11
L 3.4 cm., D of head 0.4 cm.
Bronze pin. Bent head with bulbous head with incised lines converging at head. | KP I | S11 204.8 |
| 14 | Trench no. 18
L 5.7 cm., D 0.2 cm.
Bronze pin fragment. Pin point lost, from undefined grave. Eye formed by bending shaft. | CP 2/3 | J22 701.7 (Graves) |

Fig. 90 Metal implements and accoutrements and arrowheads

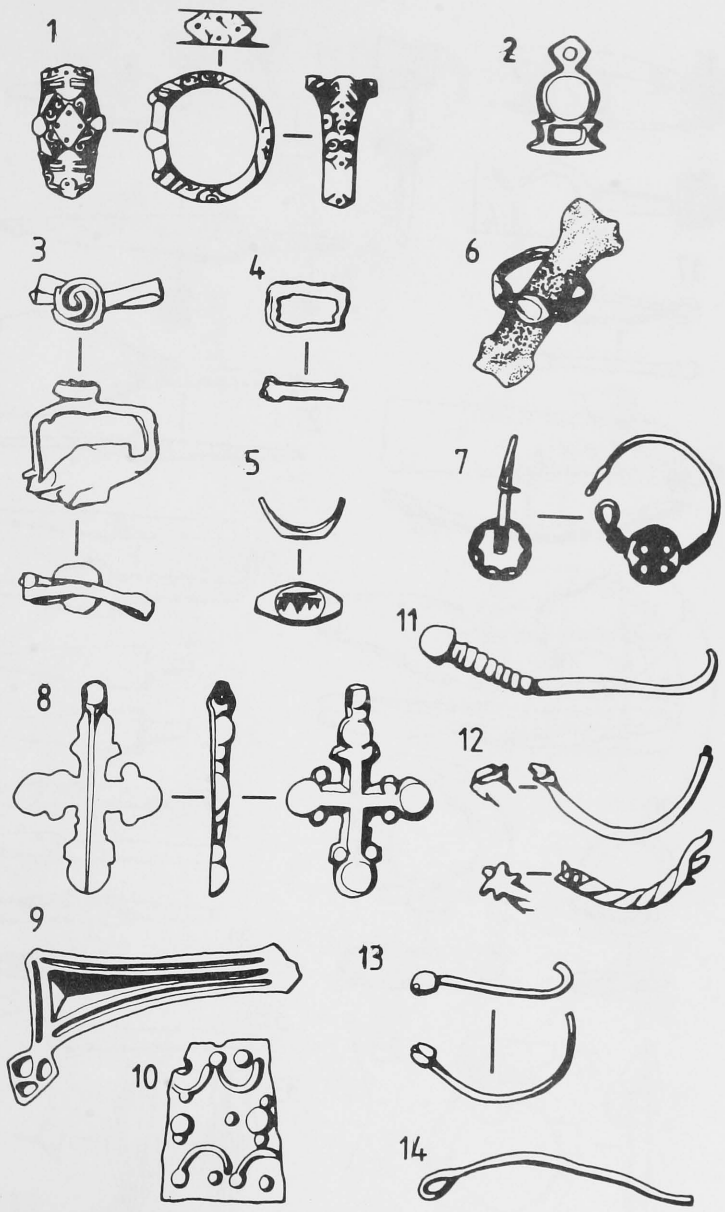
15	TK 70/18 L 17 cm., W 3.6 cm. Iron knife blade. Pointed and slightly curved knife blade, almost complete. Two rivets for hafting to wooden or bone handle. Some of haft and possibly other rivets lost.	KP I	S11 203.7
16	TK 70/10 L 16.6 cm. Iron scissors. Eight fragments of corroded iron scissors. Rivetted at pivot. Blades and one lyre-shaped handle preserved.	KP II	S11 203.3
17	TK 70/8 L 4.1 cm., Th. of arms 0.12 cm. Bronze tweezers. Small pair of tweezers, spatulate ends, in form of hair clip. Complete.	KP I	S11 201.4
18	Trench no. 15 L 6.4 cm., W 1.4 cm., Th. 0.4 cm. Fragment of iron knife blade. Small piece (point?) of a knife, corroded.	Cleaning	R11 500.3
19	Trench no. 25 L 7.5 cm., W 0.8 cm. Iron knife (?) fragment. Very corroded fragment of (?) curved knife blade.	KP I?	S10 502.11
20	Trench no. 9 D 2.2 cm., Th. 0.3 cm. Iron ring. Corroded length of iron, shaped into a circle with one end hammered over the other.	KP I	R11 601.8
21	Trench no. 14 D 3.4 cm., Th. 0.8 cm. Iron ring. Very corroded.	KP I	R11 605.4
22	TK 70/25 D 3.6 cm., Th. 0.9 cm. Iron ring with attachment. Attachment, which appears to be complete, is corroded to ring.	CP 2	J21 304.4
23	Trench no. 16 L 2.7 cm. Thin copper wire.	CP 2?	J22 704.2
24	TK 70/2 (a) L 2.7 cm., max W of head 1.2 cm. Iron nail fragment, with rectangular head and shaft. (b) L 1.5 cm., max W of head 1.4 cm. Iron nail fragment, with roughly round head and round shaft.	Cleaning, probably KP I	S12 0.1
26	TK 73/66 L 7.1 cm., max. W 1.0 cm. Iron arrowhead. Tang with round section broadens to head, which is rectangular in section and tapers to point. Complete.	Cleaning	R9 1400.1
27	Trench no. 2 L 6.4 cm., W of blade 2.0 cm., Th. of blade 0.3 cm. Iron leaf arrowhead. Tang, round section, widens to knob at junction with head. Head is flat with curved sides; the leading half and point are lost.	KP I	R11 601.8
28	Trench no. 24 L 5.4 cm., max. W 1.2 cm., Th. 0.5 cm. Iron arrowhead. Corroded arrowhead, tang roundish in section; flat triangular head.	KP I/II	S10 501.14
29	Trench no. 3 L 4.3 cm., max. W 0.9 cm. Iron arrowhead. Broken tang, round in section; head rectangular in section tapering to point, which is lost.	KP II	S10 501.2
30	Trench no. 11 L 4.9 cm., max. W 0.7 cm. Iron arrowhead fragment. Very corroded, most of head lost. Tang round in section.	KP I	S10 502.1
31	Trench no. 2 L 5.2 cm., max. W 0.7 cm. Iron arrowhead. Extremely corroded.	KP I	R11 602.2
32	TK 70/3 L 6.4 cm., max. W 1.2 cm. Iron arrowhead. Corroded arrowhead with long tang, which is round in section. Head, rectangular in section, broadens out from tang, then tapers to point. Complete.	KP II	S12 3.1
33	TK 70/5 L 3.1 cm., max. W 1.2 cm. Bronze trilobed arrowhead. Arrowhead with three vanes and hafting socket. Complete. Vanes slightly damaged and bent. Found with a fragment of an iron shaft (?) (not illustrated).	CP 2/3	J21 301.1

Fig. 91 Faience and glass beads, carved bone, misc. clay objects and glass

34	Trench no. 3 W 10 cm., H 1.0 cm., Th. 0.5 cm. Blue and green faience bead fragment.	CP 2/3	J22 701.17 (Graves)
35	Trench no. 2 Max. D 1.6 cm., Th. 0.2 cm. Blue faience bead fragment.	CP 2/3	J22 701.17 (Graves)
36	Trench no. 1 Max. D 1.5 cm., Th. 0.3 cm. Aqua blue faience bead or button.	Cleaning	R11 600.4
37	Trench no. 1 Max. D 1.0 cm., W 0.7 cm. Aqua blue faience (?) bead fragment.	Cleaning	S10 500.3
38	TK 70/12 ¹ H 1.2 cm. Ornate glass or paste bead. Black and white bead with applied blobs. Decoration of curvilinear whorls. Irregular shape.	CP 1	S11 205.9
39	TK 71/38 D 1.1 cm., Th. 0.6 cm. Glass bead. Intact. Colour not recorded.	KP I	R11 602.2
40	Trench no. 13 L 2.7 cm., W 1.4 cm., Th. 0.4 cm. Carved and decorated bone. Bone carved into arrowhead shape, with four incised roundels with central dots on one face of head. Possibly inlay.	KP I/II	S10 501.8
41	TK 71/41 H 2.8 cm., W 0.8 cm., Th. 0.5 cm. Carved bone.	KP I	R11 601.8
42	TK 70/26 D 5.9 cm., H 7.5 cm. Clay object. Bell-shaped fired clay object, pointed top, flattish base slightly damaged. Reddish o., grey core.	CP 2	J21 304.4
43	TK 70/4 D 6.6 cm. Clay stamp. Circular fired clay stamp; design of six lines, three horizontal and three vertical, evenly spaced and dividing the circle into sixteen parts. In each part an irregular incuse.	CP 3	K21 101.2
44	TK 73/79 H 11.2 cm., RD 9.2 cm., BD 3.9 cm. Glass goblet or hanging lamp. Complete goblet or lamp with slender stem and small pedestal base, outward sloping walls, folded rim. Indentation in bottom of bowl. Three applied vertical handles from rim to upper body. Translucent greenish glass. Kraelling 1938: 524, (fig. 20, no. 17 (376), pl. CXLI Crowfoot and Harden 1931: 206, pl. XXX, 50	CP 1/2	K21 103.4
45	TK 71/48 RD 2.2 cm., H 11.2 cm., Th. 0.2 cm. Unguentarium. Small blown glass bottle with thickened base (thickness 1.3 cm.). Elongated body pinched in at shoulder; thin collar, slightly outsloping neck, simple rounded rim. Opaque milky colour. Small chip missing from body. Photo: McNicoll 1973a: 167, fig. 9 (left)	CP 2/3	J22 701.16 (Graves)
46	TK 71/47 RD 2.2 cm., H 12.1 cm., Th. 0.3 cm. Unguentarium. Small blown glass bottle. Elongated body, pinched in at the shoulder; large swelling just above base of neck, which slopes out slightly to simple rounded rim. Opaque yellowish green colour. Some blackening on surface; spiral striations visible on body. Intact. Photo: McNicoll 1973a: 167, fig. 9 (right)	CP 2/3	J22 700.11 (Graves cleaning)
47	TK 71/46 RD 2.4 cm., H 11.9 cm., Th. 0.2 cm. Unguentarium. Small blown glass bottle. Elongated, slightly bulbous body, pinched in at shoulder, swelling above neck, which slopes outward slightly to simple rounded rim. Opaque whitish glass. Intact. Photo: McNicoll 1973a: 167, fig. 9 (centre)	CP 2/3	J22 701.11 (Graves)

Pl. 39 and 40 *Carved stones*

1. TK 70/33 CP 2 J21 303.2
H 51 cm., W. 37 cm., Th. 24 cm.
Rectangular worked block of stone. Light brown roughly worked stone, decorated on one face with five incised crosses with tips of crossbars divided.
2. TK 70/32 CP 2 J21 303.2
H 49 cm., W 36 cm., Th. 17 cm.
Rectangular worked block of stone. Light brown roughly worked stone, decorated on one face. Rough maltese cross in relief, with finger-like shapes radiating from the corners of the crossbars, all within a sunken inset circle, from the bottom of which are cut two channels curving away from each other.
3. TK 70/29 CP 2 J21 303.5
H 35 cm., W 26 cm., Th. 17 cm.
Rectangular worked block of stone. Light brown roughly dressed block, decorated on one face within a sunken circle a maltese cross in relief. Two channels radiate from bottom of circle to the base of the stone.
4. TK 70/31 CP 2 J21 303.5
H 56 cm., W 37 cm., Th. 12 cm.
Rectangular worked block of stone. Light brown roughly worked stone decorated on one face. Within a sunken roughly rectangular field, a maltese cross in relief with semicircular notches in crossbar ends and foot. A relief circle at foot, and two channels cut in base of stone.
5. TK 70/30 CP 2 J21 303.5
H 53 cm., W 36 cm., Th. 12 cm.
Rectangular worked block of stone. Whitish roughly dressed block of stone decorated on one face. In sunken roughly rectangular field, a relief cross with curving edges and curving incised lines. Semi-circular indentations in ends of arms, and two channels cut from the bottom of the sunken area to the base of the stone.



Jewellery and other metal objects

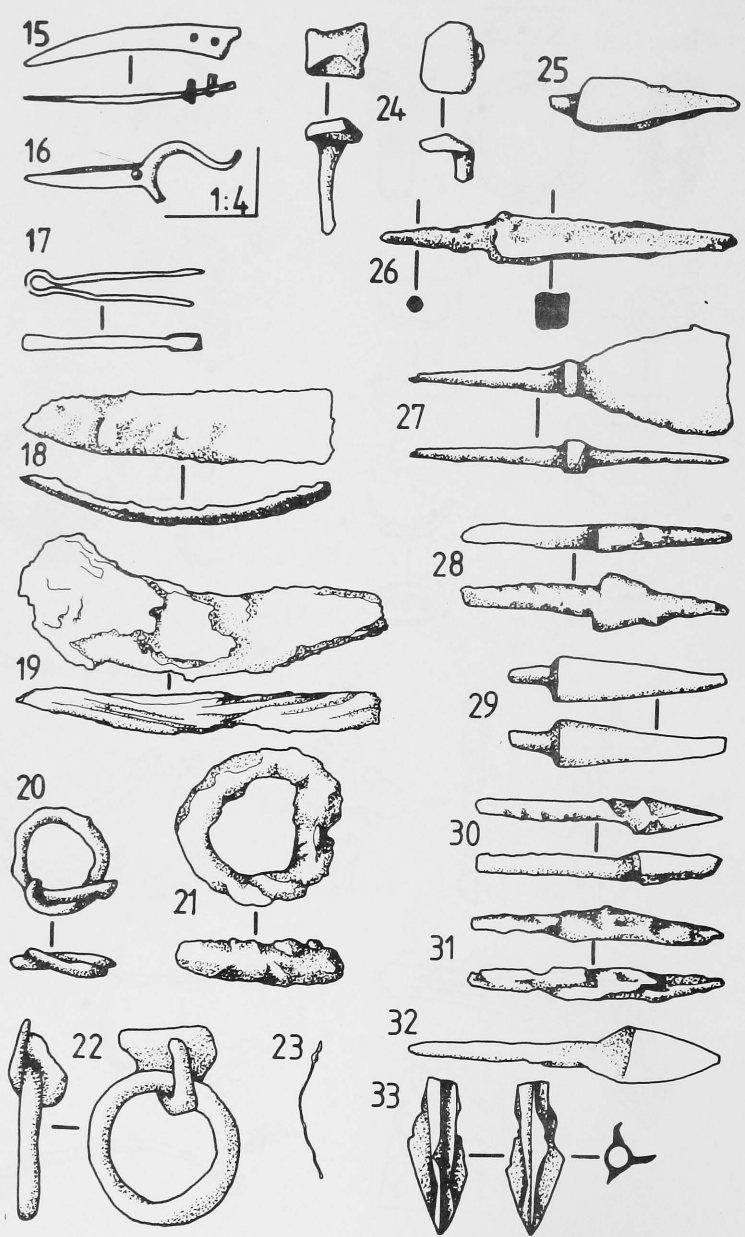


Fig. 90 Metal implements and accoutrements and arrowheads

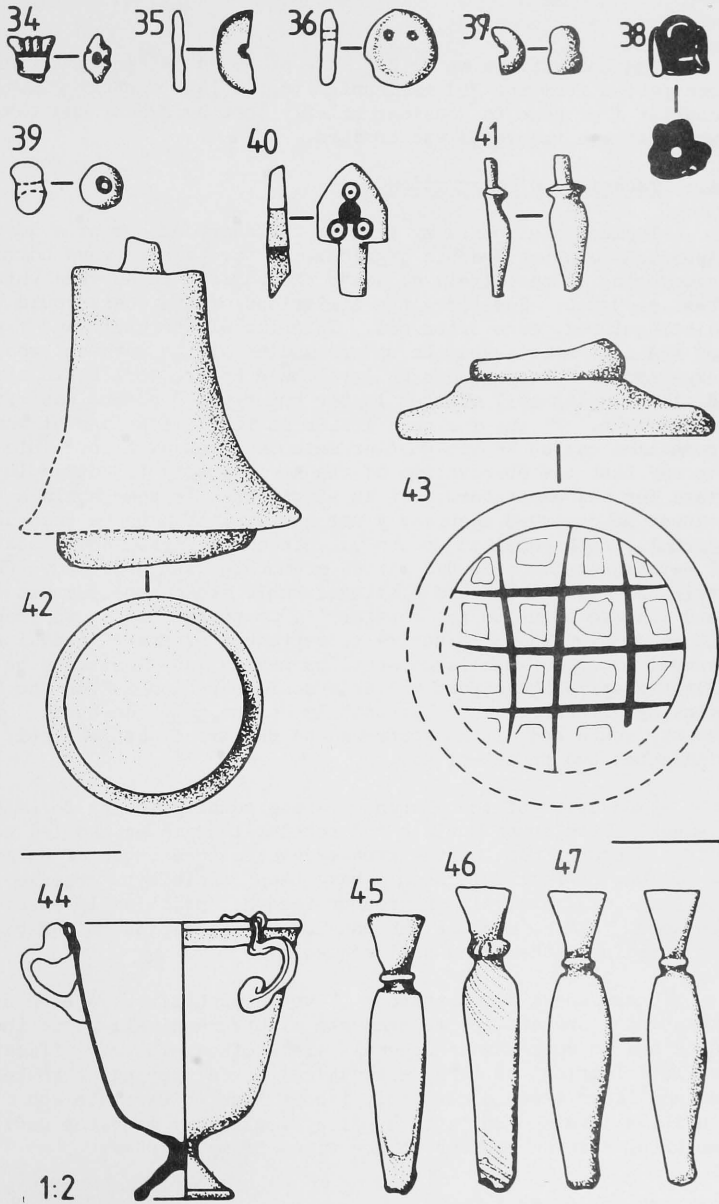


Fig. 91 Faience and glass beads, carved bone, misc. clay objects and glass

CHAPTER 7

CONCLUSIONS

The excavations at Taşkun Kale produced evidence of sporadic occupation from the 3rd millennium to the 14th century A.D. In this chapter I propose to consider briefly that evidence, and the way in which it was recovered and treated.

1. Technique of excavation

Taşkun Kale opened my eyes to the shortcomings of a doctrinaire approach to stratigraphic digging. On the kale we were normally excavating comparatively close to the surface in an area which had been ploughed. Sometimes the striations of the share could be distinguished, more often not. In spite of the skill and experience of the site staff, and the understanding of the workmen (who had excavated for two seasons at Aşvan kale before work began at Taşkun), distinguishing soil changes in the uppermost deposits was often impossible. It was for me a lesson in the limitations of what are sometimes called Kenyon-Wheeler methods of excavation. This is not to say that the observation of the stratigraphy is not an important task for all excavators; it is simply that in some soils strata cannot be observed accurately nor can soil changes be recorded visually with complete accuracy. Since the Taşkun Kale excavations I have more than once had fierce arguments with colleagues who maintain that all strata are distinguishable and can be accurately drawn, and that to argue to the contrary is to reveal one's own incompetence. It is my view that the desire to represent excavated deposits unequivocally in published sections may in many instances be the first step in the report writer's self-deception and/or the hoodwinking of the reader. Fortunately on the kale the burnt deposit at the south end of the fortress and the architecture itself clearly indicated two phases of use.

Excavation of the church area was equally vexing for a different reason. Here human burials and robbing for stones had led to the disturbance of most of the area excavated to a depth of as much as 2 m. Theoretically it should have been possible to observe the sequence of grave, pit and robber trench; practically it could not be done. Again, much of the phasing had to depend on observation of building rather than soil sequence.

Under these circumstances it would probably have been sensible to abandon the attempt to excavate stratigraphically over the whole area and to concentrate on small areas of careful stratification while 'clearing' or 'area excavating' or 'stripping' elsewhere. A decade later I would certainly labour less to excavate and record fugitive levels. But such a policy would have been too radical for me then, running counter to the views of my teachers.

2. The Taşkun Kale pottery catalogue

Another aim of many Near Eastern archaeologists, viz. the

establishment of a ceramic typology or type series in order to demonstrate a sequence of changing shapes through time, could not be realized at Taşkun Kale. Occupation was sporadic, chronological fixed points few and uncertain, and individual periods of occupation appear to have been comparatively brief. Internally no development of the pottery shapes could be observed, nor does the consideration of the comparable material from Aşvan enable the formation of a type series, sensu stricto.

Thus the collection of pottery from Taşkun Kale illustrated in this book is simply a collection. It does not demonstrate change through time in any major forms, although I have pointed out some aspects of the collection which differentiate it from the earlier Medieval II group excavated at Aşvan. In neither glazed wares nor plain wares of the late medieval period of the Aşvan district can development be discerned; without the evidence of the coins no closer dating than the generally accepted '1200-1400 A.D.' could be offered.

In view of the uncertainties of the relationship between the three major chronological groups - the Hellenistic, CP I and KP II/CP 2 and 3 groups - each is presented in the catalogue in its own sequence.

3. Conclusions and hypotheses

It is clear that part, possibly most, of the population of late medieval Taşkun was Christian. A Christian building had stood at Taşkun for centuries before the late medieval expansion; Christianity clearly had deep roots throughout the region during the Byzantine period. Although the location of the graveyard of the first church's users is unknown, late medieval Christians evidently used the environs of the second church as a graveyard. Of course it cannot be proven that the occupants of the late medieval village were the ones who buried their dead around the church, but it seems highly probable. The size of the Christian community is unclear; if the village was spread over the same area as the pottery and wall stumps (10 ha. +) we might expect a population of hundreds. The graveyard, by no means fully excavated, produced sixty or so skeletons from a period of occupation which was probably brief, to judge by the absence of occupation build-up and the evidence of the coins. The latter suggests an occupation of less than one, or at most up to two generations, a period from ca. 1300 to ca. 1350 A.D. at widest.

In the absence of bone and palaeobotanical analyses we can only speculate on the basis of subsistence at Taşkun in the 14th century. The physical aspect of the Aşvan district has been described in detail by others (Wagstaff 1973, Hillman 1973 and Mitchell 1980), extrapolating from modern times (there is no evidence of radical change in the last five centuries) we would expect that the husbandry of sheep, goats and cattle was important. Pigs may also have been kept. As in this century, the surroundings were probably extensively dry-cropped. Some irrigation agriculture may have been practiced, but it is obvious that Aşvan was much better provided with land which could be intensively irrigated.

The agricultural advantages of Aşvan over Taşkun raise the question why the latter was occupied at all. That the late medieval

occupation was not a great success seems evident from its brevity. But the precise reasons why it was not a success and under what circumstances it was abandoned cannot now be established, partly because data are lacking and partly because what data we have are ambiguous. Only hypotheses can be offered.

Perhaps the most important missing data concern not Taşkun but Aşvan. We do not know whether there was a contemporary village there or not. On the kale of Aşvan Stephen Mitchell found a medrese of the late 13th - early 14th centuries. But was there also an extensive settlement at the foot of the mound? If as seems likely there was not, it is possible that the population of Aşvan was for some reason resettled at Taşkun in the late medieval period. We shall return to this proposition in a moment. If it is on the other hand assumed that there was a large contemporary community at Aşvan, it seems likely that the two villages would have been competing for some resources; and if this were so, the result of the competition may have been the abandonment of Taşkun.

To return to the resettlement theory: in one way at least 14th century Taşkun Kale was a unique community in the Aşvan district. It was dominated by a fortress. So far as we know neither Aşvan nor any other side in the neighbourhood had a fort or was fortified. Discussion of the fortress at Taşkun is hampered to some extent by the fact that as far as we know it is unique in form and size in Anatolia at this period; here we shall discuss it only as a feature of the Aşvan district.

The fortress, which dominated the late medieval village at Taşkun was undoubtedly too small and inadequately equipped with water storage facilities to provide a refuge for the whole community. It was built to house and protect a garrison of two or three score souls. It seems unlikely that the garrison was intended to withstand major military attack, nor could it have blocked effectively a well executed raid such as that carried out by the Arab forces of the Hamdanid Sayf al-Dawfa in the 10th century.¹ The function of the fortress and its garrison then was to exercise local control. Whilst it was well placed for surveillance over the Elâzığ (Harput)-Aşvan road where it passes by Taşkun, it could not interdict the crossing of the Murat near Aşvan. The inference is that the purpose of the fort was primarily to enforce the will of the government on the local population and to keep the peace, in the manner of the jandarmalar of modern Turkey. The establishment of a garrison of this sort by the early 14th century rulers of Eastern Anatolia, the Ilkhanids, is not surprising; inscriptions from as far apart as Ankara and Ani attest to Ilkhanid efforts to organize their Anatolian possessions (McNicol 1973a: 171, n. 5, for refs). What is more surprising is that comparable 'police posts' of similar date have not been identified.

There is no incontrovertible evidence that the fortress was occupied solely by males, but the absence of household equipment such as querns and loomweights suggests that various domestic tasks frequently associated with women were not carried out in the fortress.

1. I owe this reference to James Howard-Johnson, whose paper 'Byzantine Anzitene' will appear shortly as part of the proceedings of a conference organized by Stephen Mitchell in Swansea in 1981 on the Roman and Byzantine frontiers of Eastern Anatolia.

The corollary is that the garrison was not local. The religion of the soldiers is also less than certain, but they were probably not Christian. This deduction is made from the re-use in the fortress gateway of a worked stone, probably from the first (CP 1) church; the cross carved on it in relief, was subsequently crudely chipped away. The position of the stone makes it certain this this desecration occurred during the construction or occupation of the fortress; it is unlikely to have been carried out by Christians.

To sum up:

1. The settlement, CP 2 church and the fortress date to the time of the strong and effective Ilkhanid rulers of the early 14th century, Uljāitū and Abū Sa'id. They lasted no more than about fifty years, and probably considerably less.
2. Some or all of the village population was Christian.
3. The fortress was an instrument of local control.
4. The garrison was probably not Christian.
5. The only contemporary building known at Aşvan is a medrese, which presumably has Islamic connotations.
6. Aşvan is in several ways preferable to Taşkun as the site for a village.

From these data we put forward the following hypothesis. About 1300 A.D. the Christian population of Aşvan was compelled by the Ilkhanid authorities to move from Aşvan to the less favoured site of Taşkun. The reason for the Ilkhanid action is uncertain, but may have concerned the Murat crossing's security. The construction of the medrese and its survival through the early 14th century may be evidence of a Muslim community at Aşvan. The installation of a non-Christian garrison at Taşkun prevented the population from moving back to Aşvan.

The end of the settlement at Taşkun is also explicable in the terms of this hypothesis. The death of Abū Sa'id in 1335 A.D. led to the rapid dissolution of Ilkhanid rule in Anatolia. Withdrawal of the garrison would have allowed the population to return to its favoured abode at Aşvan. Although the graveyard at Taşkun may have been used for sometime after the abandonment of the village, it appears that in time the church fell into disuse and the chapel was stripped of its furniture (and roof?), although its heavy carved stones were left in an orderly (=reverent?) fashion in front of the undamaged altars. The occupation of Taşkun Kale thus came to a peaceful end.

Envoi

In the early '70s, with the impending destruction of the village of Aşvan by the Keban Dam's waters, the community began to disperse. Most, alas, drifted off to the larger towns. However, a few families opted to stay in the district, and construction of Yeni Aşvan (New Aşvan) began on the edge of the high water line some way south of Taşkun Kale. The villagers asked if they could use the stones from Taşkun, but they were not mine to give. I expect that they used them anyway.

Report has it that sometimes, when the level of the Keban Dam falls far enough, the mound of Taşkun Kale appears above water. Taşkun was never likely to be a tourist attraction, but I like to think that it might one day be possible to row out across the lake to revisit the high point of the site where first I directed an excavation.

IDENTIFYING SPATIAL DISORDER

by Roland Fletcher

Introduction

In 1978 Tony McNicoll asked me to carry out a spatial analysis of the fort of Taşkun Kale. My purpose here is to discuss the methodology and the more general consequences of the analysis.

The fort was added to and altered during its use and several possible descriptions of the successive spatial characteristics of the fort can be obtained. In addition the site has been affected by post-depositional damage and was, of necessity, selectively excavated. The successive forms of the fort are in consequence incompletely represented in the recorded plan. The site offers the opportunity to study spatial changes and to indicate ways in which damage and sampling can affect the study of spatial patterns. Analytic procedures can be pushed as far as possible, to assess what policies may help or hinder the investigation of space in archaeological sites. My study of Taşkun Kale is a methodological experiment.

My policy has been to use crude procedures both to handle the problems which result from an inevitable partial representation of the original structures and to describe the arrangement of space in the fort. These procedures could be used during fieldwork and later on in preliminary assessments. One purpose of this paper is to show that an impression of the dimensional character of a structure can be obtained by simple methods requiring nothing more than some paper, a writing implement and the ability to add and subtract. The methodology for describing the spatial arrangement is, however, naive and its results suggest several ways in which further rigour and clarification could be introduced.

My overall intention is to assess a proposition that human communities will be liable to generate spatial disorder even if they are trying to produce spatial order. The occurrence of spatial disorder can be understood in terms of a model of the ways in which spatial order is generated. The consequences of spatial disorder can be seen as a corollary of the need for a coherent spatial framework if community life is to remain viable.

The specific role of this paper is to argue that a simple methodology can identify the absence of dimensional order as well as the presence of such order. I then wish to illustrate the ways in which spatial message models can affect our interpretation of the behaviour of human communities, and to indicate how the methodology needs to be made more rigorous and sophisticated.

Basis - the spatial message model

Human beings are habitually able to produce consistent personal

spacing behaviour without being fully aware that they are doing so (Hall 1966). Tacit, repetitious ordering of space is an ordinary element of human daily life. People can locate themselves at specific distances relative to other people without being aware that they are doing so, and without using any measuring device other than their eye and brain (Fletcher 1977: 49). We can therefore expect that human beings are able to arrange their material spatial context in a similar fashion. Just as personal spacing behaviour is a collection of indicators about how to locate oneself in space, so likewise we can expect that the material form of a settlement should also carry a spatial message of some kind about how space is to be ordered.

Studies of other settlements have indicated that the structures of a settlement act as a communication device transmitting a message about a way in which space can be arranged in the horizontal plane (Fletcher 1980i). The message consists of numerous dimensional signals. The width of a door is a signal, a particular dimension. The length of one wall of a room is another signal in the dimensional message of a settlement.

What has appeared from the spatial analyses so far carried out is that when we obtain central tendency and variation descriptions for the distribution of all the types of spacings we can identify in a settlement, those values tend to form a pattern. If the settlement contains many different types of spacings, e.g., door width, room length, room width, then the central tendency values tend to occur in clumps (fig. 92) (Fletcher 1977: 90). Settlement space can apparently carry a dimensional message of considerable redundancy. A given community appears to use very similar spacings to arrange a wide variety of features with differing functions, made of different materials and produced by differing methods of construction. For example, in a settlement, spacings around 3 m. might have expression

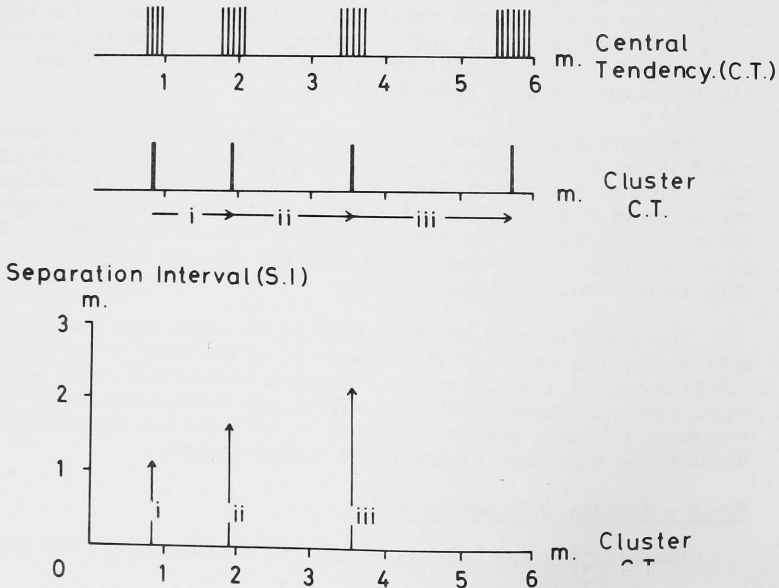


Fig. 92 Serial patterns of central tendency

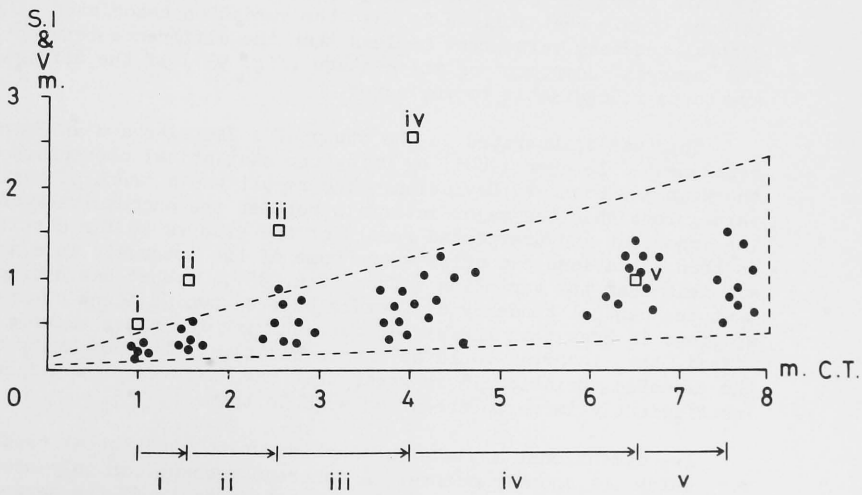
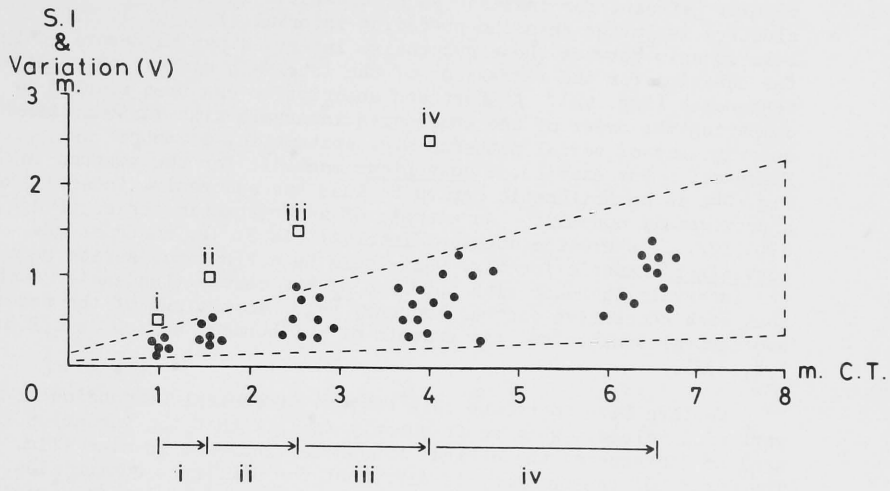


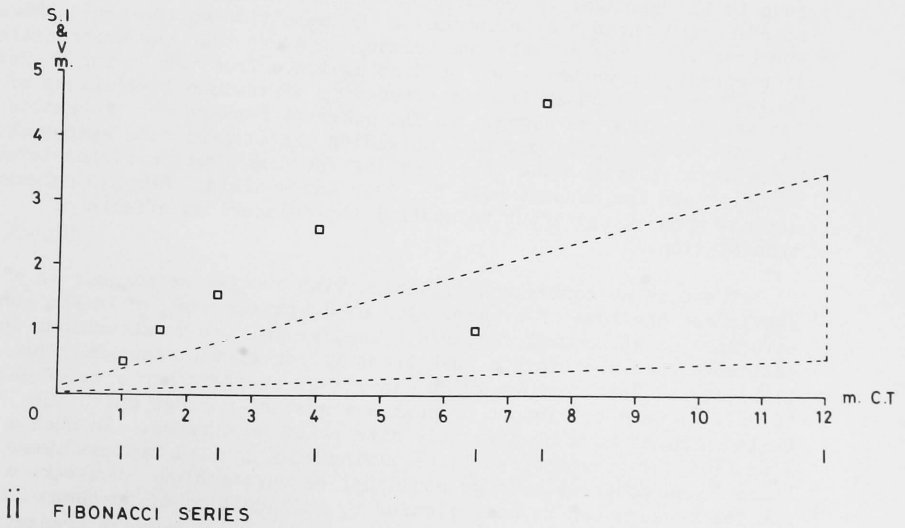
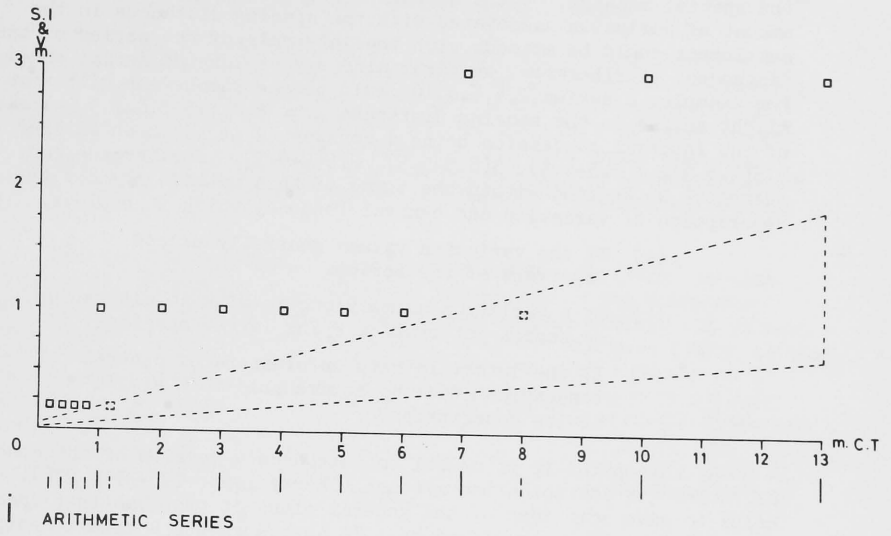
Fig. 93 Variation trends

in grave length, room width, length of gaps between timber posts in a platform and so on. In the same settlement spacings around 4 m. might occur in room length, courtyard radius, lengths of fencing and the gaps between residence units. What we then find is that these clumps of central tendencies are related to each other in a simple way. The interval of separation between each cluster tends to fall into a regular pattern, for instance each successive interval between the clusters is larger than the preceding interval (fig. 92). The relationship between these successive intervals can be described by the equation for the regression of the intervals against the central tendencies (fig. 93). A shorthand description can then be used by comparing the order of the successive intervals with various standard descriptions of serial patterns e.g. Arithmetic, Geometric and Fibonacci. For example, a convenient mnemonic for the pattern in Fig. 94i is an Arithmetic series because the successive intervals are approximately constant. An example of an Arithmetic series is 2,4,6,8,10,12..... where the constant interval is 2. By contrast the convenient mnemonic for fig. 94ii would be a Fibonacci series because the intervals increase with the size of the central tendencies such that each successive central tendency value is the sum of the preceding two central tendencies. An example of a Fibonacci series is 1,2,3,5,8,13,21.....

We then have to relate this pattern of central tendencies to the variation values. What we frequently find is that the variation values tend to increase as the central tendencies increase in size (fig. 93). The nature of the tendency is different for different communities. In terms of a workable message there is a simple rule relating variation to signals. The clumps of central tendency values linked by the orderly arrangement of intervals are components of a message. Each central tendency clump is different from its neighbours. But the difference depends upon the gap between it and the adjacent clump. The more that gap is narrowed the harder it would be to distinguish between them. What follows is that the variation associated with a central tendency value must be less than the difference between it and its "nearest" component of the message (fig. 93) if the differences are to be recognisable to any actor.

This was illustrated in the study of a Ghanaian and an Egyptian settlement (Fletcher 1980i) by using the statistical convention of the Mean and Standard Deviation. The result was a trend of variation values less than the major intervals between the successive Means. The important and unexpected result of the studies so far carried out is that situations can arise where some of the intervals in a sequence are less than the variation values (fig. 93). What has happened is that the central tendency difference between two adjacent clumps of spacings is less than the variation occurring for those values. In effect, that interval would be unrecognizable to the community because the expected variation is so great that the "difference" would be insufficiently large to appear as such to them.

The dimensional message is coherent up to the central tendencies for which the anomaly occurs. A coherent message can only occur for spacings larger than those involved in the anomaly if the series shifts to much larger intervals, greater than the degree of variation which creates the anomaly (figs 94i, ii) (Fletcher 1977: 103).



(ii) Relationship between serial patterns and variation trends

As is plain from these examples there is no inevitability to the relationship between variation and central tendency. Anomalies of the kind described above can, and apparently do, occur. In the cases described however, the anomalies do not destroy the overall coherence of the spatial message. But a situation can be envisaged in which the amount of variation associated with the spacing distances in the settlement could be at odds with the intervals of the series of spacing distances. Furthermore, we might also expect loss of serial order. For example, a series 2,4,6,8,10 could become incoherent with some slight shifts in the spacing distances e.g. 3,4.5,5.5,8.5,9. Instead of the interval succession being a constant 2 it has been altered to 1.5(4.5-3), 1(5.5-4.5), 3(8.5-5.5), 0.5(9-8.5). Incoherence can therefore be defined within the terms of this methodology and the description of variation and central tendency which it employs.

- (a) If the variation values generally exceed intervals of the series.
- (b) If a variation anomaly occurs with no alteration of series interval size for larger spacings.
- (c) If the intervals between clusters of central tendencies cease to be amenable to a simple series description.

At this point it is useful to introduce a version of the concept of "noise" in communication systems (Cherry 1966: 198-211, 278). This helps to give some idea of the general class of problems that incoherence in spatial messages should cause. It also suggests a relationship between energy expenditure and message coherence which offers a general model for the growth and disintegration of the spatial message used by a community.

One difficulty of any message system is signals that are extraneous to the message. A familiar example of "noise" is the crackling sound coming through a telephone at the same time as the sounds of a conversation. The crackle can become so severe that the conversation is swamped, the words cannot be distinguished from the "noise". The "noise" in a telephone line is a function of various limitations of the way in which the signals of the coherent message are transmitted. If a lot of energy is put into shielding the transmission system from outside interference and into reducing the degeneration of the intended signals then the message will be clear and audible. Message coherence depends upon energy input to control the deleterious effects of transmission.

There is an equivalent situation with spatial messages. In a settlement the mode of transmission of a spatial message is the construction of structural features. The few initial constructions in a settlement are therefore a weak transmission of the message. The liability is that factors which can affect the form and size of structures will tend to distort or mask any spatial message which the builders might have been tacitly attempting to express. In such a situation the occupants would be living in a spatial context where "noise" and coherent message could not be unscrambled. However, a spatial message can be made clearer by the addition of further structures, i.e. the expenditure of more energy on message transmission. When some spacing distances are being displayed more frequently than others there will be the basis for a recognizable

The more features there are carrying the various parts of the message, the more redundancy it will possess and the message can be more secure and clear. When a settlement contains many structural features a single oddity created by adverse circumstances or human idiosyncrasy will tend to have little effect on the overall message.

The irony of this process of addition and its significance for settlement dynamics is that it need not, in the long run, necessarily lead to further clarification. One of the characteristics of the repeated replication of a message through time is a tendency toward cumulative error, eventually increasing to such a level that the original message is swamped with confusion. Unless large amounts of energy can be put into editing the integrity of the message will be lost.

Two extreme possible situations can arise. The first is that order would simply go on cumulating, especially if the community possesses sufficient energy to delete structures, whether old or new that happen not to fit the prevailing pattern. But more likely is that disorder will in the end increase through time with more and more replication. Some old buildings and features will tend to survive; successive generations of builders will perceive a slightly different spatial context and build in relation to their perception; and editing out structures involves a cost in energy that the community might not be able to sustain even if it could consciously recognize an "out of place" feature.

The implication is that many settlements may never get beyond their early phase of development because the community failed to build up sufficient structures quickly enough to supply a coherent spatial context. Without such a context the community would lack a predictable milieu for its daily life (Fletcher 1977: 107). The theoretical expectation is that the community should cease to function as a viable unit, just as would happen if a basis consensus about other kinds of classifications were lost within a community. If a settlement attains a coherent spatial pattern we should then find later on that it will begin to display loss of spatial order. We might commonly recognise this as the late phase of a settlement shortly before its abandonment. The space in a settlement may therefore go through a cycle from lack of representation of order, to cumulative order and then to cumulative disorder and termination.

Review

It is important to note that there is no implication whatsoever that the community which apparently produced a dimensional message will be aware that it has done so, let alone be aware of the precise mathematical description or the convenient mnemonic which we can use to refer to that message.

Material spatial behaviour is a specific case of the usual characteristic of non-verbal signalling that human beings are rarely aware of its pattern, though they know that such behaviour occurs. Rules of etiquette are the most obvious illustration (Argyle 1975: 62).

Two characteristics of non-verbal signalling are of particular relevance. The first is that a small number of acts in isolation do

not give much clue to regularities in behaviour. Secondly, error is possible. People tend to consciously notice divergence from the expected and they act against it if they have the authority and/or the energy.

Divergence from the expected can always occur. We should not presume that settlements will always display perfect dimensional order. Individual builders could create structures that might lack a coherent spatial pattern and spatial arrangements could lack pattern when there are so few structures that examples of types of spacings are simply rare. At the other extreme a large number of additions and alterations to a settlement could introduce sufficient errors to obliterate a previously existing pattern. The consequence of persistent loss of spatial message coherence should be the same as the failure of other communication systems. The community should cease to function in the particular settlement that is displaying an incoherent spatial pattern. This does not mean that the human group would necessarily die out. It might, but movement, either individually or as a group, to a different settlement context is an alternative. Ordered spatial messages are not inevitable, they are only to be expected as a corollary of, and necessary basis for, viable community life. If we are to study this interaction we need a methodology which is capable of indicating whether or not a serial pattern and the appropriate associated variation trend occur in a settlement.

PART 1 - ANALYSIS

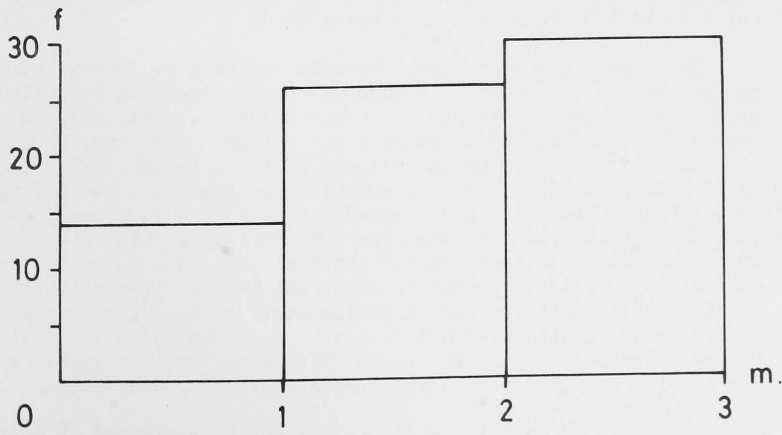
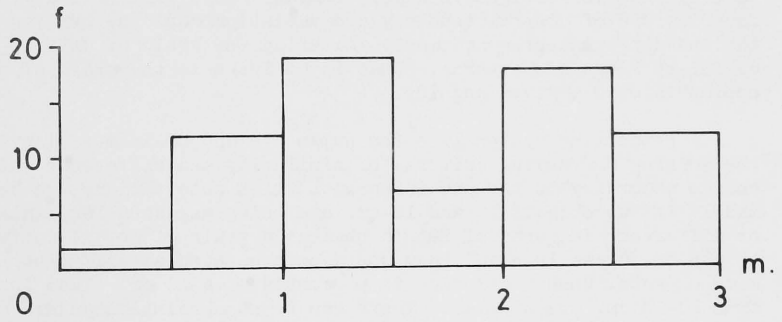
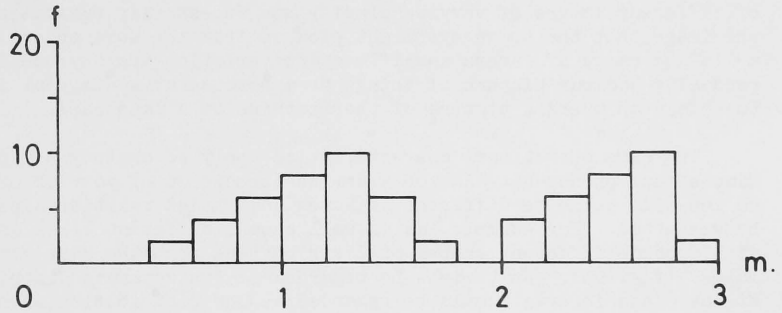
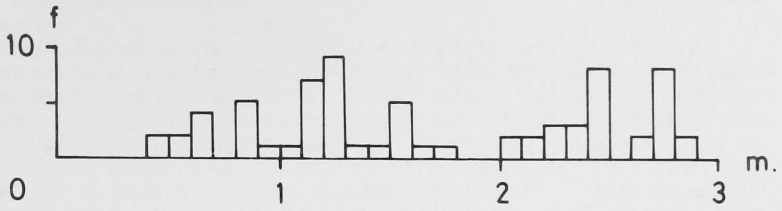
Research procedure

i) Analytic procedure

The procedure used is simple and tedious and is an empirical product of work on eight settlements in Ghana. In essence there are two problems in trying to study patterns of signals. First, to find methods of measurement and presentation that will indicate presence or absence of order. Secondly, to assess whether or not any identified regularities describe the thing they are claimed to describe.

Measurement

What to measure is defined by the terms of proxemic analysis (Hall 1968). Proxemics is concerned with spacings between interacting beings and with the relationship between particular spacing distances and particular kinds of social behaviour. The universe of possible measurements is limited to those spacing distances occurring between active, similar linked entities, such as two people in an intimate interaction or the people in a conversation group. The spacing distances are classified in terms of the context in which they occur. Likewise the distances between inert, similar linked entities in settlements are arranged in categories such as doorwidth and room length (Fletcher 1977: 60-67). Diagonals across rooms are not used in this study because they are members of another possible class of space interrelationships.



Class intervals and distribution shape

Presentation

A method of presentation is itself an analytic device, but it is also not the only one possible, nor can any patterns it shows be regarded as the only possible ones. The presentation problem is like the empirical search for the appropriate focal length for a camera lens to produce a sharp picture of the things at which it is pointed. The key feature of this exercise is that as the focal length is altered so different kinds of detail will become visible, ranging down to the microscopic. As you alter the nature of the film you will get a variety of different images of varying clarity not necessarily equivalent with the image that the human eye might pick up from the same object. Only a limited range of camera and film characteristics are any use in producing a clear picture of things at a particular scale, for instance to obtain an overall picture of the features of a landscape.

The same operational characteristics apply to a study of spatial, dimensional phenomena. As you alter the precision of your observation so you will perceive different features and varied relationships between them. For example, as is well known, different class intervals will produce different shapes of distributions from the same sample of values (fig. 95). What might be regarded as two separate distributions at one class interval could be regarded as one distribution when the same values are arranged in a larger class interval. Two different descriptions of central tendency and variation could be derived from the two different presentations. Altering the grain of detail produces different kinds of patterns. What is at issue is the grain of detail appropriate to a given enquiry.

A perceiving system like the human eye and brain must inevitably be working on varying criteria of similarity and difference which change according to the precision with which observations are being made. If two objects 10 and 16 cm. are being assessed for similarity or difference in terms of length then at a grain of detail equivalent to a 5 cm. class interval they would be presented as different. Those same objects, when their size is presented at a 10 cm. class interval from 10-20 cm. are similar. There can be no absolute standard of similarity and difference for a perceiving device, only a statement relative to the grain of detail being used.

Three main points follow from this relativity. One is that there can be many different descriptions of the regularities occurring in a spatial arrangement. If you are close enough to a tapestry to see the warp and weft distinctly, you will not, at the same time, be able to see the entire pattern of the colours of the tapestry. What kind of pattern is recognized, if any, depends upon the grain of observational detail being used. Another consequence is that when comparing a variety of things of the same type e.g. various settlements, you need to be consistent in the grain of observation detail which you use otherwise you will be comparing different levels of detail. The third point is that you must likewise apply a consistent analytic procedure and grain of detail to a site. If you do not, you will be mixing up patterns which relate to different levels of detail within the settlement. The result will probably be very confusing.

The grain of detail used in this study is expressed in a presentation using a 20 cm. class interval. This interval has been applied

to the other settlements in which serial patterns associated with coherent variation trends have been recognized for spacings of up to 6-8 m. The interval is an empirical product of research on several settlements and I am now using it as a standard comparative procedure. There is no claim that it is the only scale of operational detail which should be used, nor need we presume that dimensional ordering is only expressed at this level.

The procedure used in this study is merely one way of perceiving settlement space, a policy which appears to work as a description of the dimensional aspect of spatial behaviour by human groups in settlements. It probably would not work for the description of individual activity and might well be inappropriate if the analysis was to be restricted to any one of the residence units in a settlement. The crude analogy is that you would not expect to obtain a photo-micrograph if you use the lens, focal length, exposure and film that provides you with excellent landscape photographs.

The problem of "noise"

We have to cope with the distorting effects of post-depositional damage and selective excavation, and with the "noise" created by the occupants of the settlement. Some of the former effects can be handled by a reconstruction procedure (see Reconstruction Policy p.210). But even then the effects of post depositional damage cannot be either obviated or ignored. Plainly an analysis of minutiae is unlikely to be worthwhile since the studied sample must be presumed to incorporate idiosyncratic acts by the original occupants, combined with the effects of damage on particular parts of the site.

This is indeed what we find. If distributions with sample sizes of two examples are used to obtain central tendency values then no dimensional order is evident. Likewise if distributions with fewer than 5 values are used to obtain variation values then no trend is evident. What appears is low variation for all central tendencies up to about 10 m. The trend of increasing variation which we might expect at some period in the growth of the fort is swamped. The minimum distribution sample sizes are therefore set at 3 or more for a central tendency to be obtained, and 5 or more for a variation value.

Similarly, the specifications for dividing polymodal distributions into their uni-modal components cannot be subtle either. Frequency of occurrence in modes, and distance between modes cannot be used in a simple procedure. The use of such attributes would involve the use of statistical descriptions of distribution shape. Rather, the method has to concentrate on the least frequently occurring dimensional values. If we ignore class intervals which contain no dimensional values then no serial or variation patterns are evident among the identifiable distributions. The minimal requirement is that a class interval with no dimensional value in it has to be regarded as a divide between distributions.

Dealing with the "bridge" values between two modes requires more discussion. Take an ideal situation where the dimensional values are arranged into distinct and discrete modes (fig. 96i). The pattern of peak occurrences is apparent. But this could be somewhat blurred by the addition of two values in every class interval (fig. 96ii). Plainly the peaks have not disappeared. But unless some rule is devised to

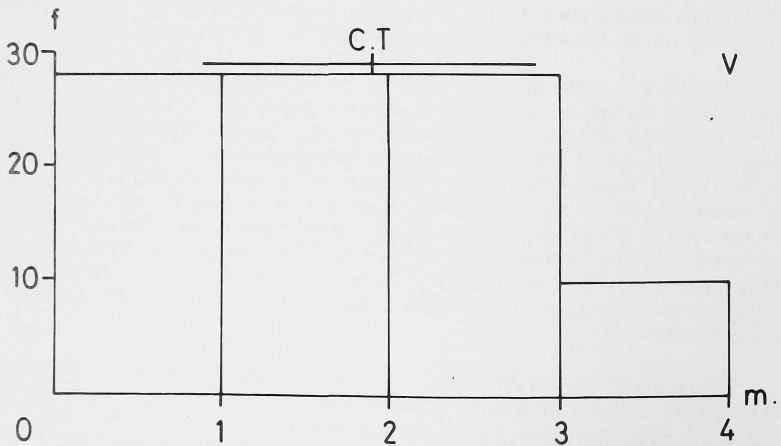
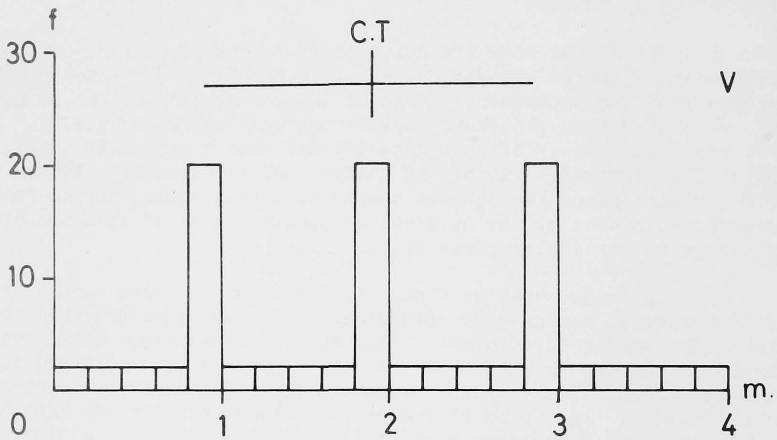
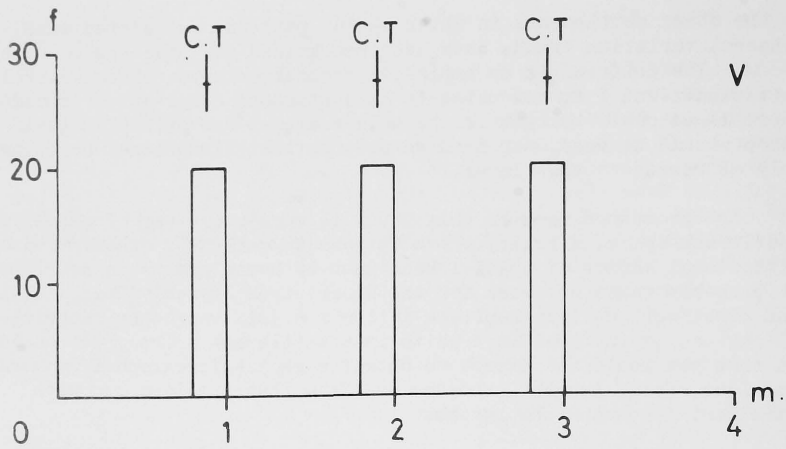


Fig. 96 "Noise" effects and central tendency/variation descriptions

deal with the general but low incidence of values in all the intervals, a description of the entire collection of values can result in only one central tendency description and one variation value, as if the pattern were being described at the grain of detail expressed by a 1 m. class interval (fig. 96iii). We need to find out whether or not a simple procedure can be devised to deal with the "noise" so that the finer details at the smaller class interval can also be described. A procedure is needed, appropriate to the grain of detail, which will tend to suppress the noise but not obliterate the possible message. Obviously the selectivity with which noise can be handled by a crude procedure will be limited. A crude method is liable to wipe out the message as well! The procedure is the equivalent of adjusting the treble control on a radio to reduce the amount of hiss. If you try to cut out all the "noise" you also suppress some of the treble sounds of the music thereby missing part of the message which is being transmitted.

The policy must avoid being too gross otherwise the message may also be suppressed. If the restriction on "noise" is not sufficiently vigorous then "noise" will prevail. In Taşkun Kale if a single value occurrence in a class interval is regarded as sufficient to define a divide between distributions then no serial or variation pattern can be identified. This criterion for suppressing "noise" would appear to be insufficiently vigorous. The policy chosen therefore specifies that a "bridge" between two modes is to be identified when at least two adjacent class intervals each contain one dimensional value. This "bridge" is split to create two distributions (fig. 97).

Many possible ways of coping with "noise" could be devised, some of them highly sophisticated statistical operations. While I am in no doubt that these will ultimately be necessary my purpose now is much simpler. All I aim to do is show that a minimum arbitrary ruling, consistently applied, can be used to provide an indication of the presence or absence of dimensional order. It has to be shown that the suppression of "noise" procedure does not inevitably predefine either the occurrence of order or disorder. Since presence and absence of order are recognizable in the Taşkun Kale data the latter requirement is satisfied.

A related problem is the issue of the changes in distribution shape which can occur over time. Two initially separate distributions can, by successive additions, be transformed into a single continuous distribution (fig. 98). But temporarily the two merging distributions could be described either as one or two distributions. Conversely a single distribution can be split by successive deletions or additions to create two distributions from one. In all such ambiguous cases which occur in Taşkun Kale, both the separate and combined descriptions are given. The alternatives are ranked. When the preceding state shows separate distributions, the separate descriptions are given greater emphasis and vice versa when the preceding state shows one distribution.

Describing the distributions

The early studies of dimensional order (Fletcher 1980i) used a Mean and Standard Deviation description of central tendency and variation as a convention even though the distributions are not Gaussian Normal. An alternative and simpler description was sought

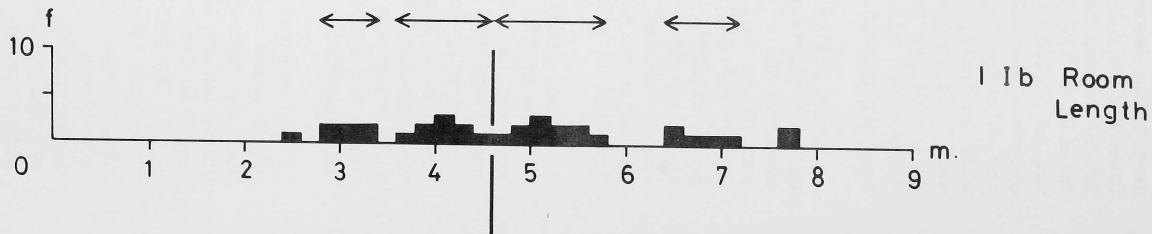
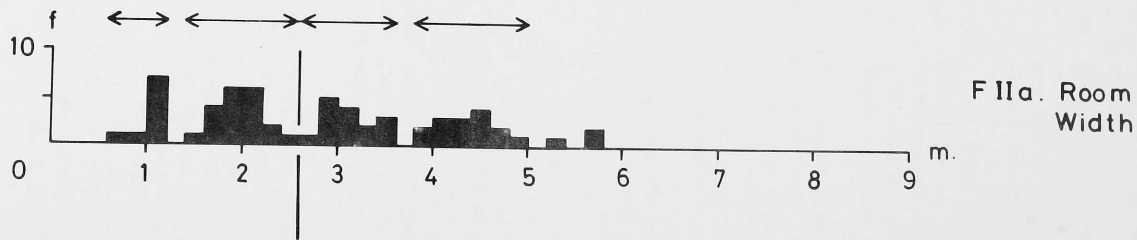
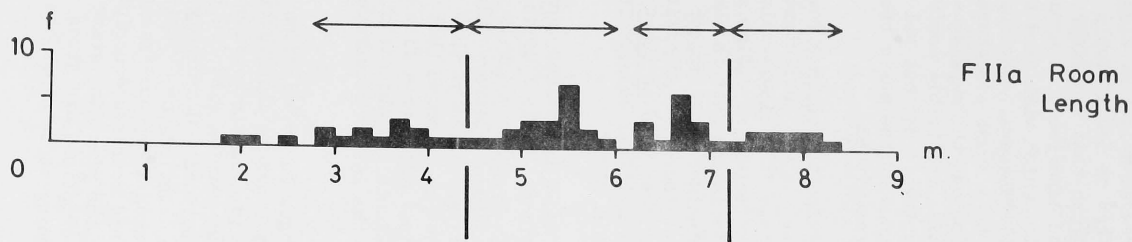
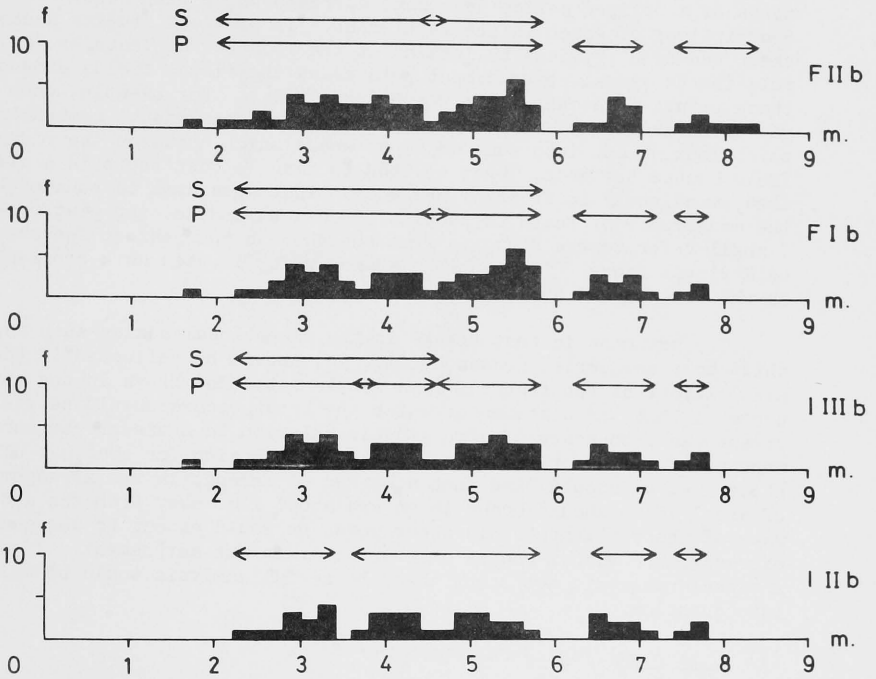


Fig. 97 Splitting polymodal distributions (see End Paper 4)



P - Primary Value
 S - Secondary Value
 ↔ - Value included in both distributions

Fig. 98 Merging of distributions

which would give the same trend of variation as the M. and S. D. description. It was found that a Median and 40% range description could be substituted (Fletcher 1977: 96-97). Such a description can be produced quickly and easily and requires no mathematical ability beyond subtraction.

Assessing the proposed serial pattern

Identifying dimensional order in a settlement is not a sufficient exercise in itself. What is required is a demonstration that the proposed order tells us something about the pattern of space in the settlement. We have to be able to assess whether or not the implications of a defined series have some correspondence with other descriptions of space in the settlement. In previous studies a cross-check has been provided by looking at the location of features in relation to visual commencement points and the visual fields around those points (Fletcher 1977: 98, 99 and 1980i). For example, when you are standing in a doorway you are located at a visual commencement point looking out into some adjacent space which contains the visual field around the door. What we tend to find is that there is a clear area immediately in front of the door. That open area is bounded by the occurrence of features such as fireplaces and seating platforms. I shall refer to the distance from the door to the nearest features as a visual range. It is this distance which is used as a cross-check on the dimensional series (fig. 99).

The argument is that breaks in the dimensional series such as the shift to a new serial sequence (fig. 94) should be reflected in the areal layout of the features in a settlement. The break in the series suggests that the distance at which the break occurs should be expressed as a boundary of some kind in relation to a visual commencement point. If, for instance, a new series begins for spacings of about 1 m. we should find that a marked difference in the arrangement of areal space should occur in an arc about 1 m. away from the doorways of the settlement. In other words we would expect to see some expression of visual ranges of about 1 m. in the settlement. If such a visual range did not occur then the serial analysis would be called into question.

ii) Site plan (fig. 4 and end paper 7)

The study of Taşkun Kale has been carried out entirely from the plan supplied by Tony and Tamara McNicoll. My information about it comes by personal communication from them.

Wherever possible the aim of a spatial analysis should be to use as many kinds of spacings and features as possible. Taşkun Kale poses several problems. The plan is partial, due to post-occupation disturbance (damage) and the necessities of selective excavation. It is also a palimpsest of walls and domestic fittings. Rooms have been added, walls altered and features built on top of each other in the rooms and the courtyard. Fortunately, in Taşkun Kale, though some corners of rooms are missing, the wall alignments are usually available. A procedure can be applied on the plan to renovate the corners. This procedure also serves to provide plans of earlier states of the fort which have been affected by later additions.

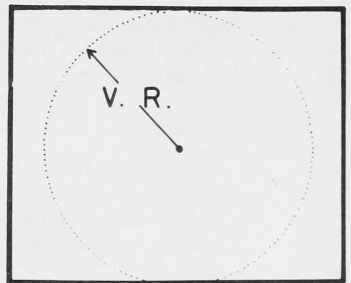
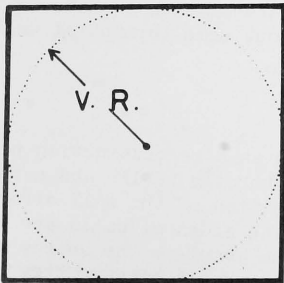
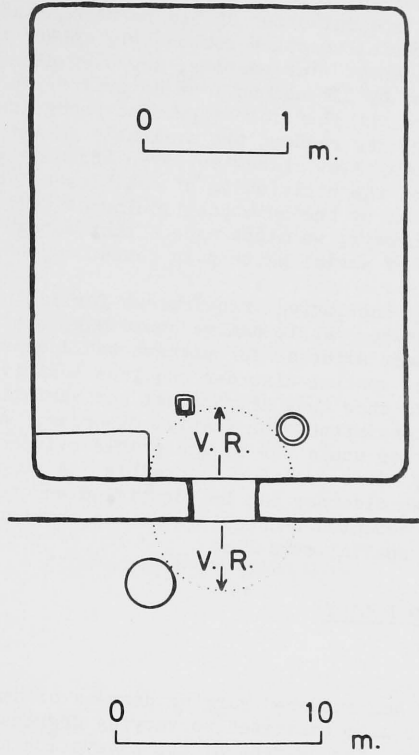


Fig. 99 Visual ranges

Irretrievable damage to walling and the lack of a secure sequence for the domestic fittings such as tandirs (hearth ovens) have to be accepted as liable distorting factors. The analysis is predicated on an opinion that spatial order should be recognizable even through such distortion. Spatial messages fortunately appear to possess a high degree of redundancy. For example, any one value in a series is usually repeated by dimensions from several types of spacings (Fletcher 1977: 90). We might therefore expect to recognize spatial patterns even when damage has reduced the available variety of types of spacings and features in a site. Likewise, even though a palimpsest and damage may have blurred the positioning of entities relative to visual commencement points, by the superpositioning of features and the disappearance of doorways, we might expect that enough will survive for the assessment of serial pattern in comparison to visual ranges.

Ironically the logical requirement for identifying spatial disorder is severe. While damage could make the sample so partial that insufficient evidence for pattern would survive, demonstrating the presence of spatial disorder requires positive evidence. The analysis has to show that dimensional and variation values present in the site are consistent with spatial disorder. Absence of possible parts of a series would not be acceptable evidence of disorder. Absence merely makes decision impossible. A purpose of this analysis is to show that disorder can be identified and to assess how much damage can be accepted because of the compensatory effect of the redundancy in spatial messages.

RECONSTRUCTION POLICY

Introduction

The fort has suffered varying degrees of damage in different sectors and is also excavated to varying degrees of completeness depending upon the arrangement of the excavation grid. These two factors result in the plan of parts of the site being irretrievably uncertain while other sectors can be reconstructed with little appeal to unknowns. I have therefore chosen a standard reconstruction procedure and have then pointed out the various parts of the site for which reconstruction becomes increasingly uncertain. The magnitude of this uncertainty is described in terms of three degrees of "repair". The first degree requires only limited extrapolation of wall alignment. The second degree requires much longer extrapolations, while in the third degree decisions have to be made about some termini of wall lines.

Procedure

Throughout the plan I have specified as a reconstruction procedure that walls continue on their known track through baulks and across the areas of damage. Straight line projection of the wall direction and parallel correspondence of the opposite sides of walls are used where no other information is available to complete the shapes of some rooms. Straight lines and parallels are used not because they are correct, but because they can be applied with consistency.

The key corollary of this policy is that walls in Taşkun Kale do not run absolutely straight nor are their opposite sides precisely

parallel. The restoration procedure does not therefore inevitably guarantee an exact correspondence between the remnant and restored parts of the site. Nor could it be said to inevitably express the same spatial pattern since no exact correspondence of the restoration and the original walls they represent could be expected. The analytic sacrifice is the price for a consistent procedure which puts the plan into a form usable for a dimensional spatial analysis but does not predefine the identification of spatial order.

An additional rule is that no invention can be made of walls entirely concealed by baulks. Such walls could occur in rooms 6, 13, 28 and 30. Having made the rule I then have to make one exception! The necessity arose because of the location of the baulk between R10 and R11 (endpaper 1). In my opinion this baulk must conceal a transverse wall. There is no other case of a transverse wall in Taşkun Kale terminating in this way to produce an L-shaped room. Such a room would be a severe anomaly in the arrangement of rooms around the courtyard (fig. 100). The position of the wall is delimited by: a

TABLE 1 (see endpaper 3)

<i>States</i>	<i>Notes</i>
<i>End state</i>	<i>Site as excavated</i>
<i>Final II</i>	<i>Rooms added after fire</i>
<i>Final I</i>	<i>Damaged by fire</i>
<i>Initial III</i>	<i>See alternative in Start State III</i>
<i>Initial II</i>	<i>See alternative in Start State II</i>
<i>Initial I</i>]	<i>Alternative States. Both could not occur in one actual structural sequence</i>
<i>Start State III</i>]	
<i>Start State II</i>	<i>Rooms 4 & 5 might also be included</i>
<i>Start State I</i>	<i>Rooms 4 & 5 might also be included</i>

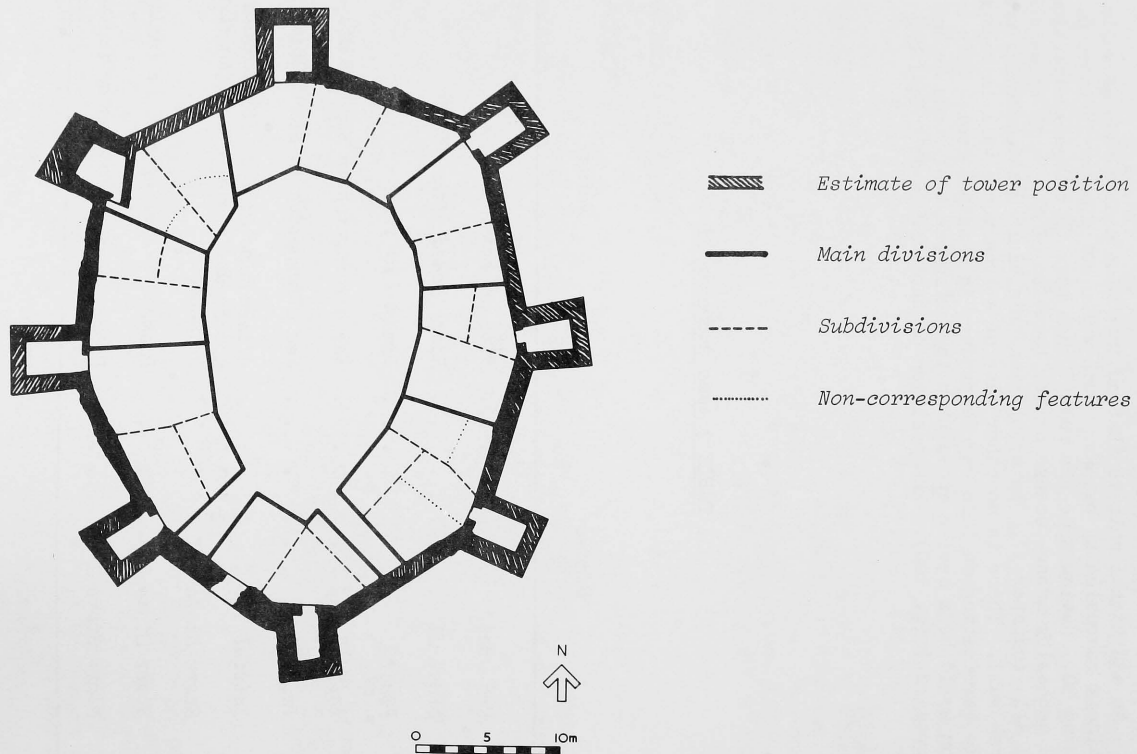


Fig. 100 Taşkun Kale. Room arrangement

block which projects from the inner face of the circuit wall; the position of the wall between 33 and 32; and the NSW corner of unit R11.

The product of this first degree of "repair" is the End State of the Site.

Longer, straight line extrapolation of wall line is required in the second degree of "repair", to restore the shape of rooms 8, 9, 11, 18, 19 and 28. It also defines the limits of 1, 4, 5, 36, 16, 27 and 24 prior to the room additions in the courtyard in Final II (see sequence).

The third degree of "repair" requires a decision about the position of the north-west sector of the circuit wall. The two ends of the inner face of the circuit wall can be derived from the shape of the tower around room 25 and the fragment of circuit wall in room 21. This third stage of repair, restores the shape of rooms 21, 23 and 26. The measurements from this relatively uncertain third stage are identified on the distributions.

The State descriptions from Start State I to Final II are derived from the 2nd and 3rd degree reconstructions.

Sequence (Table 1, endpaper 3)

The interior of the fort has been so disturbed by ploughing that only the broad outline of structural development can be obtained from the vertical stratigraphy. However, the general trend of interior additions can be derived from the layout of the rooms, the various abutments, rearrangements of access and different kinds of wall construction.

To carry out the analysis several procedural restrictions are necessary. First we have to assume as a parsimonious rule, to prevent free invention, that the fort has never contained any major stone or mudbrick wall features for which evidence has been completely eradicated. Secondly, the sequence cannot usefully be described in terms of additions of single rooms. Such a policy would require the presentation of a large number of possible room combinations. The effort would be to little gain. A message model does not require that every addition will be consistent with the existing message, only that the persisting occupation of the settlement will require the adjustment of anomalies. Assessment is needed not at the level of each addition as it occurred but rather of various overall States that the fort may have passed through. This will suffice to find out whether or not the methodology can pick up loss of order as an overall characteristic of the site.

The fort appears to have been altered on several occasions. Most obvious is the asymmetrical arrangement of rooms 6, 12, 14 and 22 (fig. 4a) within the courtyard space. Their late occurrence is evident from the stratigraphy. Several possible development sequences can be suggested for the earlier development of the internal arrangements of Taşkun Kale. These are all based on the premise that the circuit wall and main gate were completed first and that additions were then made within that circuit. The sequence proposed depends upon the overall symmetry of the fort around the Main gate and courtyard.

Commencing at the Main gate two wings of rooms extend around the periphery of the fort and meet at the far end of the courtyard. Successive additions of rooms can therefore have occurred, starting by the Main gate and ending with the completion of a continuous zone of rooms. After that, the infilling of the courtyard space would have begun (endpaper 3).

The main problem with the sequence is that several End State rooms can be regarded as subdivisions of larger room spaces, for example 28 and 29 or 15 and 16. There is no way of knowing, from the features we have so far recognized in the site or the stratigraphy whether these possible subdivisions occurred early or late or scattered through the development of the fort.

To cope with this problem I have chosen to present the distribution from each of the possible States of the fort in two forms, without the subdivisions (Condition a) and with them (Condition b) (endpaper 4). In Condition (a), for example, 28 and 29 are treated as one room with two long walls running between the courtyard and the circuit wall, and two short wall sides, one at the courtyard end and the other at the circuit wall end. By contrast in Condition (b) this room space 28/29 is regarded as two separate rooms each with two long walls and two short walls. The subdivision values are introduced for the earliest State that could include them. Final II(b) is the terminal form of both conditions.

Another problem is the alterations made to the Main Gate (1) (fig. 4a and endpaper 1). On some unknown occasion a thick wall was built across the internal access to the gate. In Start State I, I have assumed that the access was uninterrupted. In Final II that blocking wall is an inherent part of the alterations to the courtyard area. It is therefore included in Final II (a) and (b). For the other States the open access is allocated to the form without subdivision, Condition (a), and the blocked access to Condition (b), the form with subdivision.

No claim is being made that the fort actually developed by shifts from one State to the next. The proposed sequence, with its two alternative conditions of "room amalgamation" (Condition (a)) and "room subdivision" (Condition (b)) is intended only to provide possible descriptions of a number of forms through which the fort could have passed. Assessment of the change in spatial pattern in the fort is made on the basis of the range of possible forms, not from a claim that one particular sequence of additions actually occurred. There is some uncertainty about the layout of the fort which has to be accepted in the description since there is no apparent way to remedy the problem. To seek more precision would be to demand too much of the battered remains of the fort.

The proposed sequence is therefore a succession of frozen moments in what can have been a continuous and gradual development. Assessment is directed at the broad characteristics of the two alternative Conditions of the successive States. The characteristics of the sequence are reviewed in the light of the dimensional analysis.

Review

The methodology proceeds from a conventionalized reconstruction

procedure which is used to bring the fragmentary plan into a useable form. From the layout of the fort and its internal structural characteristics a broad sequence of development states can be proposed. The states of this sequence have to be presented, of necessity, in two alternative conditions of subdivided and amalgamated room space. No evidence is available on when or even whether particular room subdivisions took place. Measurements of wall dimensions, doorwidth and size of tandır (hearth ovens) were obtained from the reconstructed plan. The distributions of these various measurements are presented using a 20 cm. class interval and are processed to control for "noise" whether from the behaviour of the occupants or from post-depositional effects. Central tendency and variation descriptions are given in terms of Median and 40% range. These values are now analysed to find out whether or not serial arrangements of medians and trends of increasing variation with increase in median values occur in the successive states of the fort.

RESULTS

Introduction

One of the main problems with the dimensional analysis of Taşkun Kale is the scarcity of central tendency values compared to other settlements. Since a serial sequence is usually represented by clusters of central tendencies around consecutive modal values the poor representation in any one State can itself be expected to produce small sample ambiguities. To deal with the problem of under-representation, I have presented the data in terms of the occurrence of central tendencies over time (fig. 102i, ii). This data has been presented in two ways so that the sequence of central tendencies can be easily seen (fig. 102i) and by frequency of occurrence of the medians so that the most powerful overall signals during the growth of the fort can be recognised (fig. 102ii). All that can be shown is that some central tendency values are frequently repeated, with a shift toward larger intervals between the larger central tendencies until the 7.70 m. values are reached. No definitive description of a series is possible. Nor would the description have much meaning. The recurrent central tendencies can be envisaged as lying in a fuzzy band of values around each component of a series. All that can be stated is that the increment of the intervals is small, resembling an Arithmetic series.

i) Description of the distributions

0 to 1 m. central tendencies

In Final II/End State the medians for door space width, tandır dimensions and room 22 do not produce any readily recognizable pattern (fig. 101). Wall thickness shows a marked peak between 60 cm. and 80 cm. and a lesser peak at 1-1.20 m. (fig. 101). There is insufficient data to claim any series pattern between 0 and 1 m. Though there may be indications of clusters around 30-35 cm. and 64-66 cm. (if we leave out the 75 cm. median for room 22) there are still not enough values to claim that a particular series can be identified.

1 to 8 m. central tendencies (fig. 102i, ii)

Throughout the successive States there are medians at approximately

FIG. 101: Notes

	<i>N</i>	<i>M(m)</i>	<i>40% range</i>
<u>Tandir radii</u>	19	.30	.12
<u>Tandir width</u>	3	.35	-
	5	.66	.04
<u>Tandir length</u>	8	.64	.17
<u>Door space width</u>	32	.90	.16

Note: Tandirs (ovens) occur in two forms, round and oval. Some of the oval tandirs also have one straight side or have other features attached to them e.g. the ribs projecting from the tandir by the access to the Main gate. The dimensions were taken from the external edges of the lip of the tandir.

- : Door space width refers to the gap which may have contained a door. If the doors had wooden frames then the median would be smaller, possibly about 70 cm.
- : For Room 22 in Final II and the End State there is a median of 75 cm. and a 40% range value of 30 cm. for wall dimensions.

Note: "Oven" in 3 is excluded.

- : Tandir in 20 is included in radii and width/length.

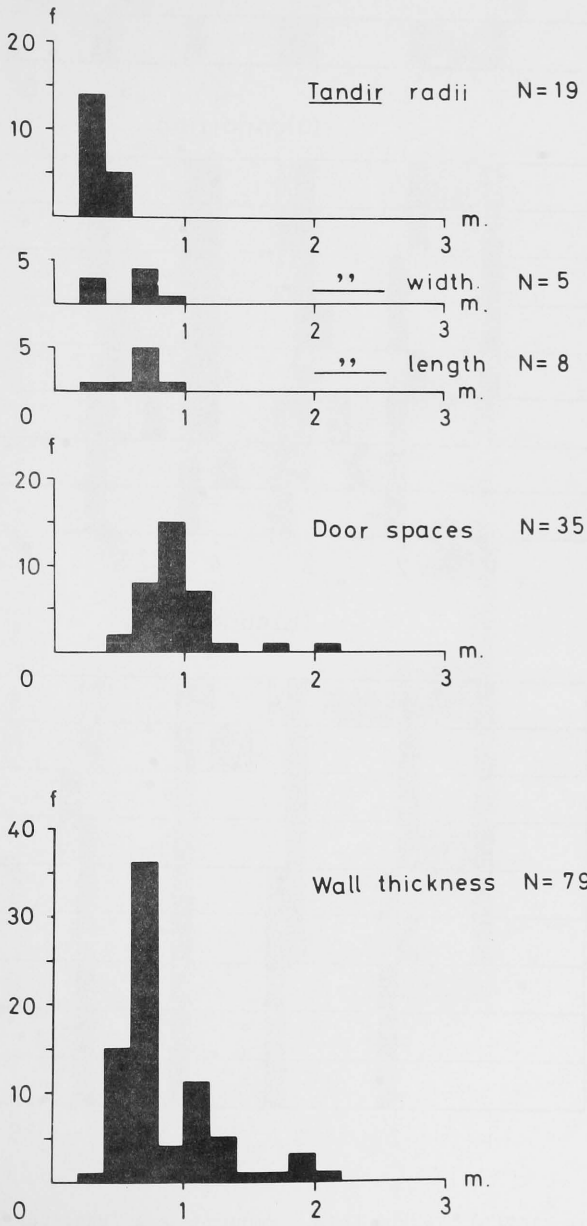


Fig. 101 Tasgun Kale. Distributions for spacings with median values less than 1 m.

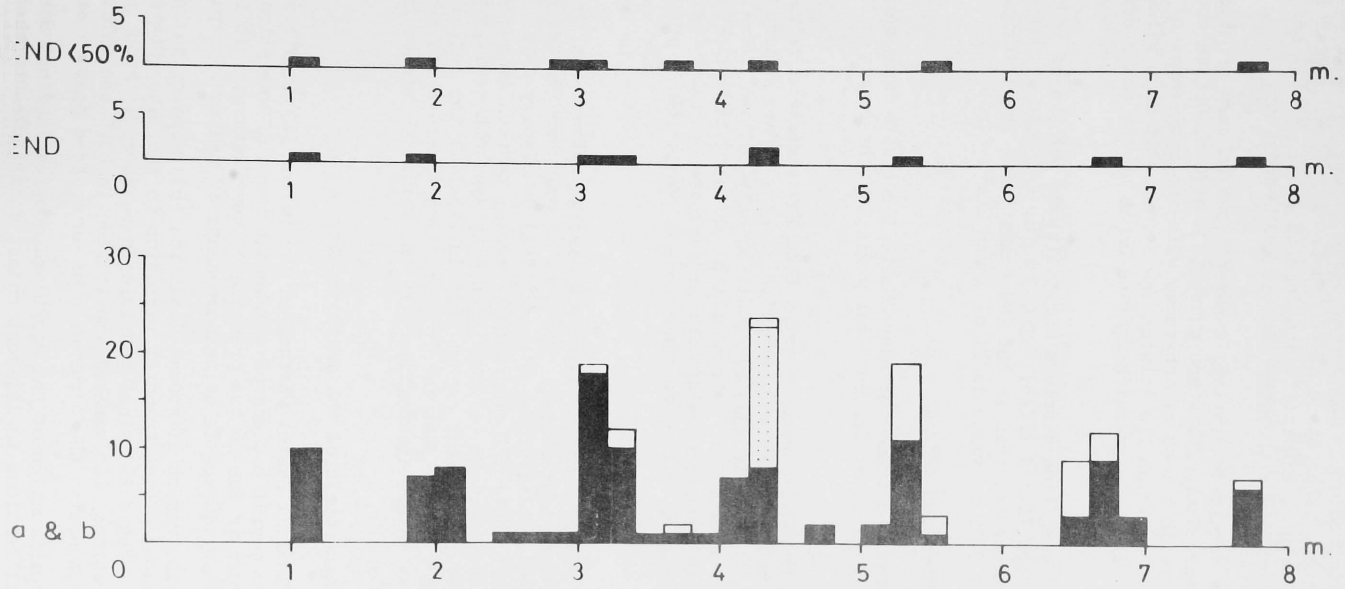


Fig. 102(ii) Taşkun Kale. Sequence and frequency of medians 1 to 8 m.

Primary values
 Secondary values
 Values for tower exterior sides.

2.00, 3.10, 4.20, 5.30, 6.60 m. There are insufficient dimensions to display a 1 m. median in any of the Start States but this median value appears in every other State of the fort. A 7.70 m. median is absent from Start State I, Initial I, and Initial II(a), III(a) and Final I(a) but is present in all the other States and conditions.

The (a) condition displays a repetitious pattern of medians except in Start State III where there is a 4.70 m. median and in Final II where there is a loss of coherence with the appearance of medians of about 3.70 m. which lie between the recurrent median values, 3.20 and 4.30 m. These intervening medians break up the rough series of intervals.

The (b) condition displays a repetitious pattern of medians except in Start States II and III(b). The 3.10 m. and 4.20 m. values are more strongly represented than in the (a) condition. The interval is reduced by a 3.30 m. value in Final I and Start State III.

40% range variation (endpaper 5)

The variation trend for Start State I contains only three values. Nor do the other Start States clearly display the expected trend of variation.

From Initial I onwards a trend from low variation values with small medians to large variation with larger medians occurs throughout the (a) condition. In the (b) condition only Initial I and II display the trend of variation. Initial III(b), Final I(b), and Final II(b), all have high variation values for medians around 3 and 4 m., which are inconsonant with the expected trend of variation.

Discussion

Start States I and II(a) display serial pattern but the variation trend is poorly represented. However, if only two further rooms, 4 and 5 are added, Start States I and II(a) do display a variation trend. Start State III always lacks serial pattern (endpaper 5). From Initial I onwards, the (a) condition displays both serial pattern and the variation trend, except that in Final II the serial pattern breaks down. By contrast the (b) condition displays the serial pattern but involves severe dissonance in the variation trends from Initial III onwards.

The main points of the analysis are:

1. The Final II State, whether in the (a) or (b) condition, lacks either serial pattern or a coherent trend of variation. The loss of order is due to the presence of new features. It is not caused by damage deleting components of the earlier pattern.
2. The subdivision of rooms (Condition (b)) appears to lead to a breakdown of the trend of variation in the later States of the fort. While it is not possible to be specific about particular alterations, the general implication is that the subdivisions did not assist the occurrence of an ordered spatial environment.
3. The construction of the courtyard complex in Final State II with its alterations to adjacent rooms, contributes to the loss of

serial pattern and the breakup of the variation trend.

4. The Start States under-represent the possible pattern. But the slight addition of rooms 4 and 5 gives Start States I and II(a) a clear variation trend as well as a serial pattern. Both Initial I(a) and Start State II(a) are equally likely moves in the early development of the fort, if rooms 4 and 5 were added first. Start State III does not appear to be a probable State of the fort, according to the spatial message model.

ii) Visual ranges

Introduction

In previously analysed settlements there have been disjunctions in the serial pattern where the intervals of the series have coincided with the rising trend of variation.

There could apparently be many different forms of this relationship between the series interval and the trend of variation. In a near Arithmetic series there should be abrupt jumps in the series interval size to keep above the rising trend of variation (fig. 94).

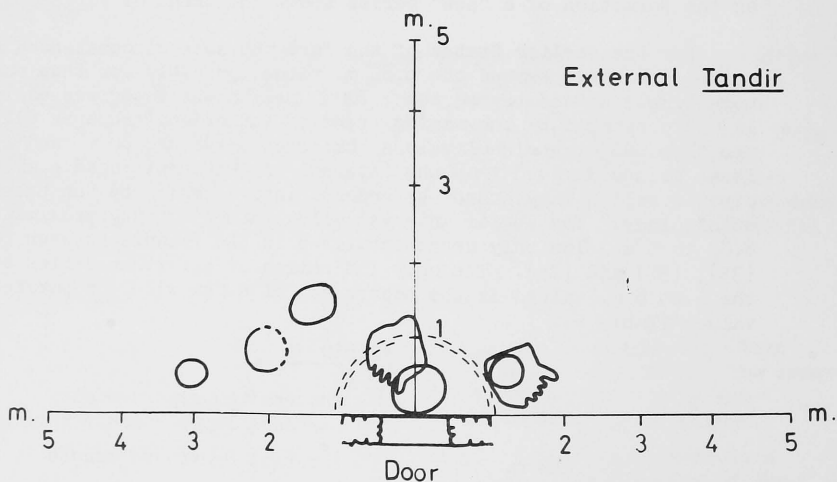
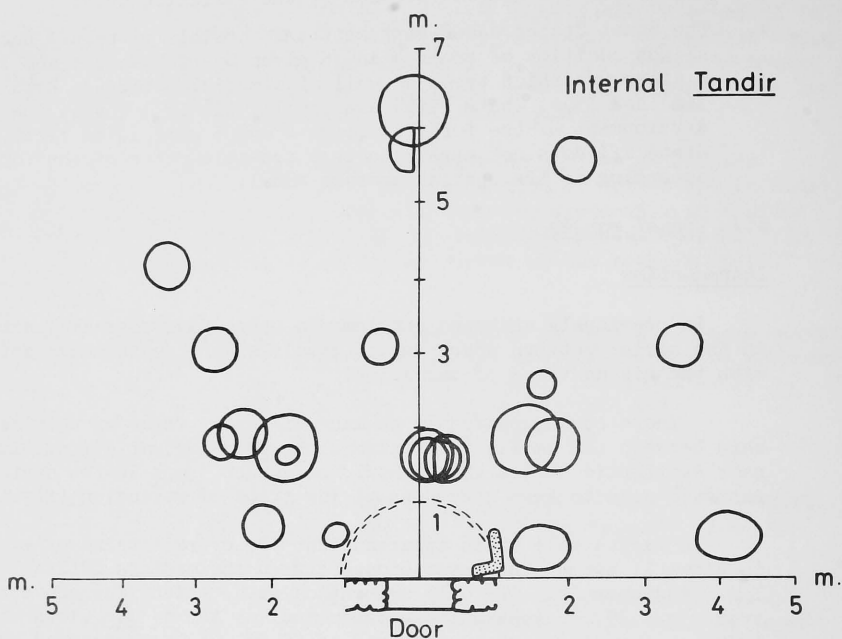
In Taşkun Kale it is apparent that the overall trend of variation in Final II swamps the separations between the medians of less than 1 m. (endpaper 6). The only separation value which lies above the trend is a 29 cm. separation between medians for tandır width and length. A series with an interval of 29 cm. would be swamped by the variation trend near the 1 m. median. Though we do not have any direct evidence for the nature of any series up to 1 m., we do know that no interval in such a series could have been larger than about 30 cm. The jump to the much larger interval from 1 m. onward becomes explicable as the formation of a "new" series above the trend of variation.


For the earlier States of the fort the same circumstances then arise somewhere beyond the 6.60 m. value, possibly for that value but more likely at and beyond the 7.70 m. median where the series interval is again swamped by the rising trend of variation (endpaper 6). There are then odd dimensional values scattered between 8.80 m. and 13.45 m. These values derived from the internal and external façades of the circuit wall. They cannot be ordered into a series by the present methodology. The serial interval allows a median at approximately 8.80 to 9 m. Its only representatives is the façades between towers (35), (31) and (25). The only indication of a further series beyond the 1 to 8 m. values is the occurrence of a few widely separated values (Table 2).

Table 2

15 m.	Internal courtyard width Distance between centres of towers
24 m.	Internal courtyard length
38 m.	External fort width
46 m.	External fort length

We only have concrete evidence for a serial pattern of some kind from 1 to 8 m. with a break at either end. The 1 m. break is more



 1 m. visual range
 "Oven" in Room 3

Note : Storage jars and pits do not conform to a 1 m. visual range.

: In subdivided room spaces 10/11, 15/16, 26/27 and 28/29 four tandir lie close to a wall. Access can have been through the roof or through a window.

Fig. 103 Taşkun Kale.
Visual range around doors.

clearly defined than the 7.70 m. limit. The 7.70 m. limit is swamped by the high variation values of Initial III(b) and Final II(b) (end-paper 6ii).

Visual ranges

The limiting values of the serial pattern should have expression in the settlement, either as a visual range out from a visual commencement point like a doorway or as the distance from the centre to the edge of an open space.

1 m. visual range

An indication of a 1 m. visual range occurs around the doorways. All the tandirs inside rooms occur at or beyond 1 m. from the nearest doorway (fig. 103).

There is one aberrant tandir, located in a door space, in the gap leading from room 4 into room 5 and a unique tandir in room 3

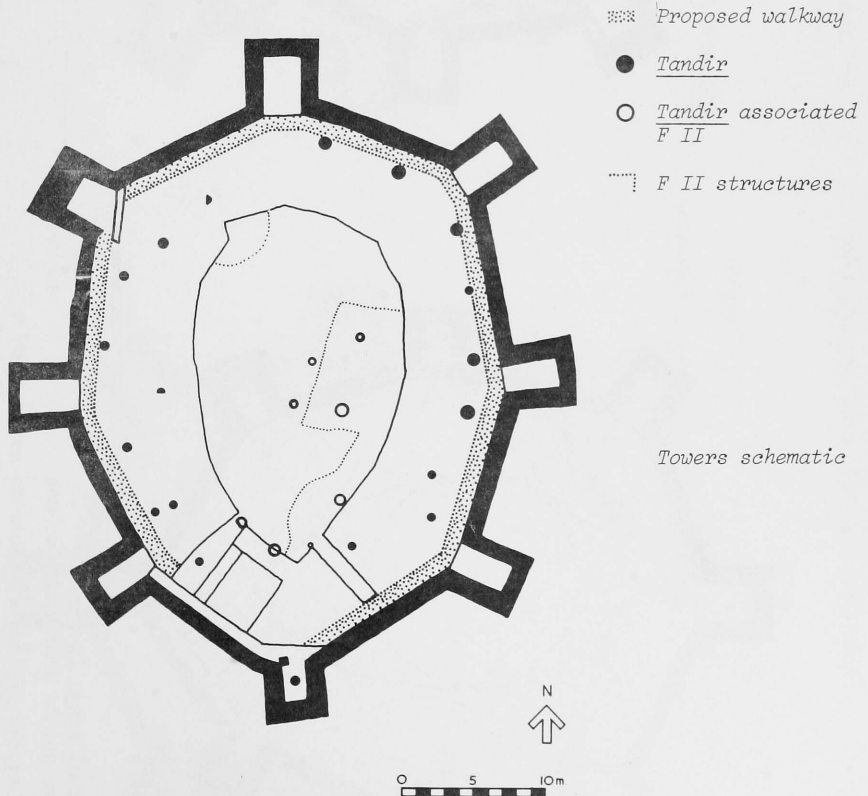
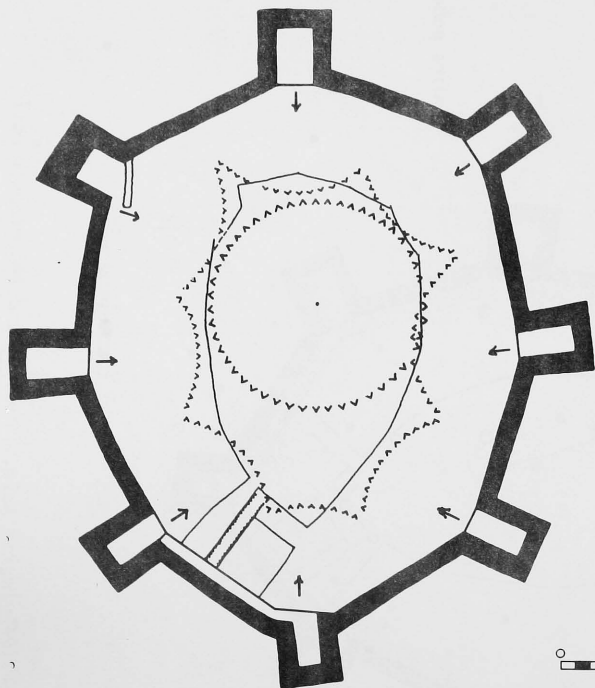


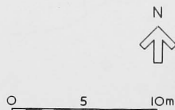
Fig. 104 *Taşkun Kale. Tandirs and the circuit wall*



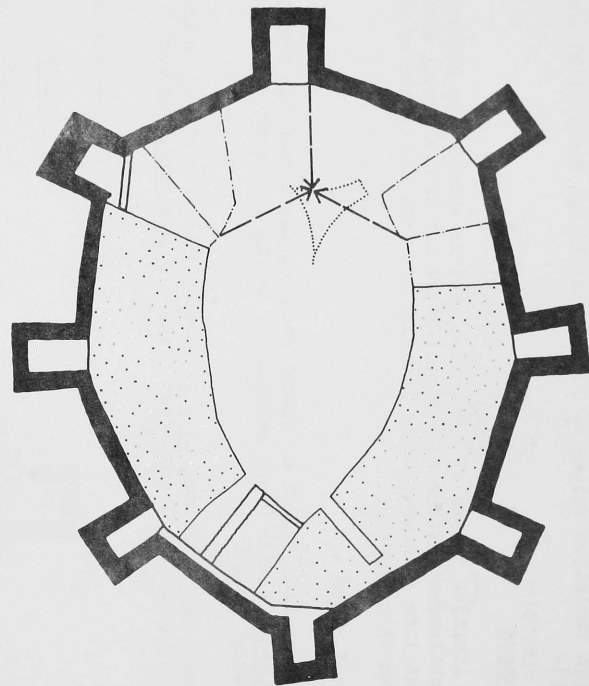
^^^^ Visual range limits
 → View points from tower access

Note: Lengths of longest rooms do not determine the visual range on the roof except from tower 31.

Fig. 105 Taşkun Kale. Visual ranges on roof and in courtyard. Final I



Towers schematic



-----) Initial III

△△△ Initial II zone more than 7.70 m. from referent

□□□ Roof (Initial II)

Fig. 106 Taşkun Kale. Visual range in courtyard. Initial III

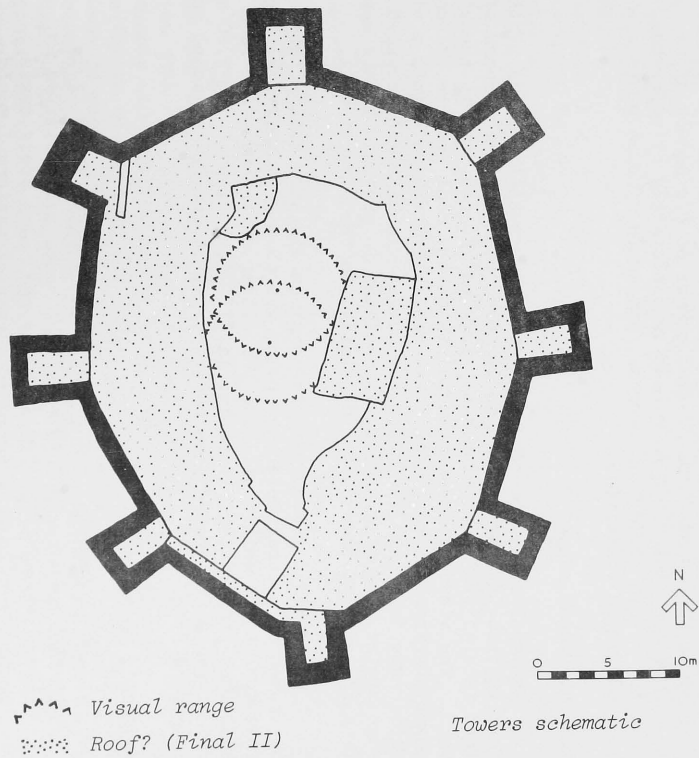


Fig. 107 Taşkun Kale. Visual range in courtyard.
 Final II

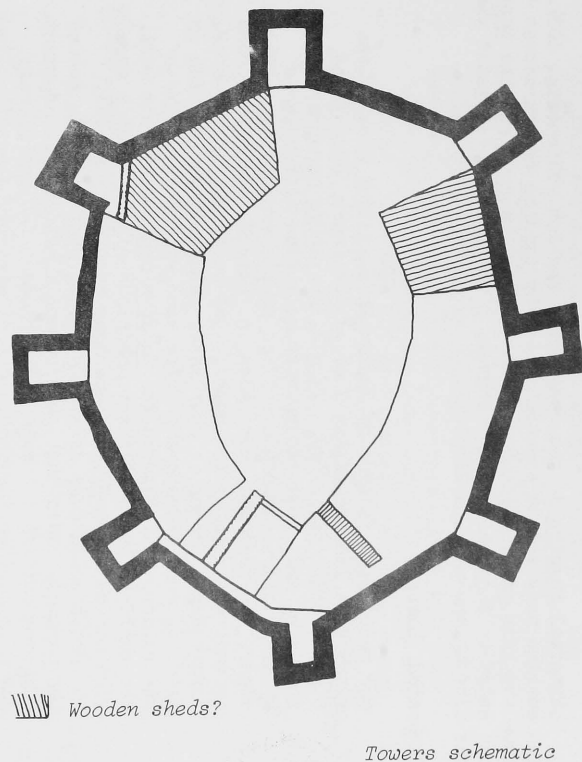


Fig. 108 Taşkun Kale. Proposed arrangement
 in Initial II

which lies across the 1 m. visual range.

External tandirs do not conform to the 1 m. zone (fig. 103). The entries to 4 and 36 are obstructed by tandirs though access to and from the Main gate is clear. These external tandirs and the tandir in the entry to 5 are all late features, structurally associated with the alterations made in Final II.

Suggested features

One perplexing feature of Taşkun Kale is that none of the tandirs is located within 1 m. of the inner face of the circuit wall (fig. 104). If all the tandir occurred more than 1 m. away from the nearest wall then patterning of space in the rooms would suffice as the explanation. There might, for instance, have been an entirely clear 1 m. zone around the edges of the rooms. But several tandirs, storage jars and pits occur in that zone. Whatever explanation is used, it must therefore involve some specific feature of the relationship between the tandirs and the circuit wall. The implication is that the positions of the tandirs were also marked at roof level, perhaps by vents for smoke. The vents would have delimited a 1 m. wide walk-way behind the parapet. Note that this is not a rationalist argument. Many communities tolerate smoky rooms. The use of roof vents is neither inevitable nor necessarily sensible. Even at 1 m. away from the parapet anyone could have tripped over the vents or stepped backwards on to them. Whether or not the vents were present cannot be decided by arguments on what would have been sensible, only by reference to the archaeological record. Fragments of such vents should be identifiable.

7.70 m. visual range

The most marked correspondence in the spatial pattern of the fort is that the maximum median distance present in the rooms of the fort is also the limit of visual range on the roof and in the courtyard. The visual commencement points on the roof are the access positions from the towers onto the roof. From those points a visual field extends about 7.70 m. to the marked visual limit produced by the edge of the roof (fig. 105). This effect is produced by the approximate symmetry of the courtyard relative to the circuit wall.

In the Final I courtyard the maximum distance that a person could be from a structural reference point was about 7.70 m. (fig. 105). This applies to Initial III and for either of the possible room additions from Initial II to Initial III (fig. 106). The 7.70 m. visual range disappears when rooms 9, 12, 14 and 22 are added in the courtyard (fig. 107).

Suggested features

A problem with the Start States and Initial I and II is whether or not the 7.70 m. visual range was delimited in the courtyard (fig. 108). While the Start State could temporarily lack an integrated spatial pattern I would not expect that situation to last for long.

only with the addition of some of the rooms of Initial III that the 7.70 m. visual range is present. One possibility is that the rooms were all added within one building season. But there is an alternative. One suggestion would be that initially there were flimsy wooden sheds built up against the curtain wall. These would have sufficed to delimit the visual field within the fort. The sheds would have been demolished when they could be replaced by rooms built of masonry and midbrick. In Final II, the contraction of the visual range in the courtyard to about 4 m. suggests that the behaviour of the occupants no longer involved the larger visual ranges that were present on the roofs. Such would have been the case if the parapets and roofs were decayed and access to the roof no longer went through rooms 5 and 36. In this State one might also expect to find structures cluttered around the outer face of the circuit wall and towers, as the earlier visual range pattern broke down.

Conclusions

The most important result is that indications of the absence of spatial order can be supplied by the crude methodology. Recognition of spatial order patterns is not therefore an artifact of the methodology. The reconstruction procedure produces dimensional values which aggregate to produce pattern in some cases and absence of pattern in others. Nor is the occurrence of disorder a function of limited sample size since more and more features are evident up to and including the final disordered state. There were more examples of dimensions of features available from Final II than in Final I and preceding States. The "noise" control policy does not preclude the occurrence of distributions at odds with either the serial pattern or the expected trend of variation. Furthermore, in Taşkun Kale the absence of dimensional order in both conditions of Final II occurs with other aberrant features of visual range. These are the three "out of place" tandirs near the main gate access, and the contraction of the visual range in the courtyard.

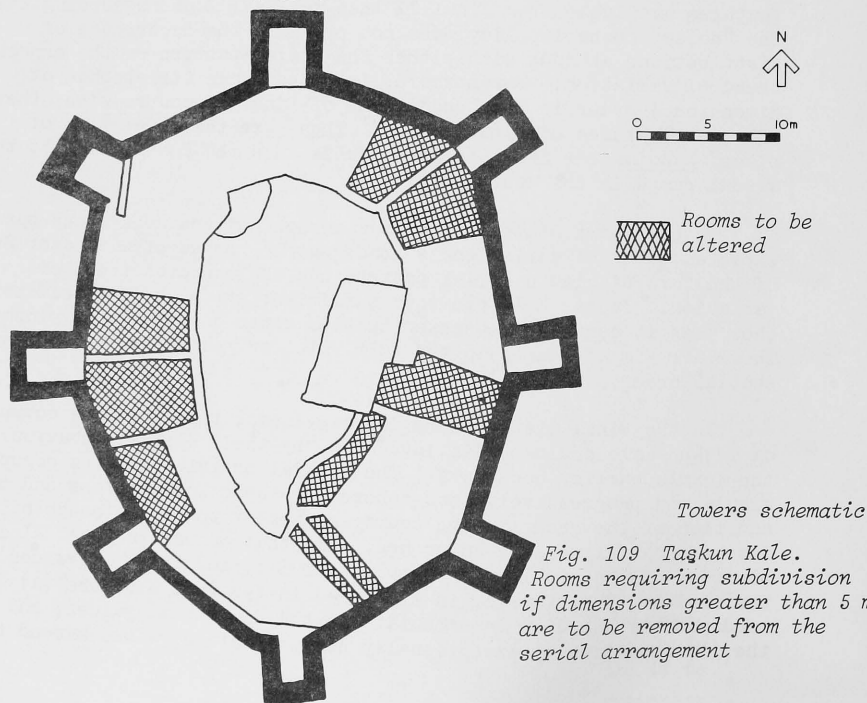
In the Start States I and II a serial pattern does occur but the expected trend of variation is inadequately represented. Later States of the fort display a serial pattern and the expected trend of variation. Taşkun Kale provides sufficient evidence in itself to show that it can have possessed spatial order during its development. There are visual ranges in the fort which correspond to that possible spatial order.

In the Final States there is no evidence that the late occupants of Taşkun Kale could be distinguished, by their spatial behaviour, from the fort's earlier occupants. The spatial behaviour of its occupants simply and progressively lost coherence. Room subdivisions and the addition of the rooms in the courtyard appear to be the cause of the loss of spatial message coherence. All that occurs in Final II is a blurring of the distinction between the 3 m. and the 4 m. values in the series. The blurring is expressed in two ways - in the (a) condition by a median intermediate to the 3 and 4 m. values, and in the (b) condition by exceptionally high variation values around the

4 m. medians. What is being specified is that ambiguity was arising because the dimensional values being added to the message could be members of several distributions rather than only one. The methodology indicates that a situation was arising which had not been present in the preceding States and is in contrast to the expected spatial order.

There are features of the spatial message which suggest that error rather than a different spatial message is involved. First, the overall serial pattern does not change. The crucial central tendency and variation anomalies occur only around the 3 and 4 m. medians. Secondly, in Final II(b), though the variation values jump for the 3-4 m. medians, there is no sign that the serial intervals on either side of that jump were different. The jump in variation cannot therefore be claimed as the start of a new series.

In Final II(b) the high variation values cut off the serial pattern at the 3 and the 4 m. medians, producing a paradoxical visual environment. The variation values delimit the serial pattern near the 4 m. medians and the visual range in the courtyard had contracted to approximately that distance (endpaper 6ii). But the structures of the fort were still carrying the earlier serial pattern even though, according to the rising level of variation, the larger dimensions would not have been distinguishable from each other as components of a series. At least nine rooms would have needed subdivisions merely to attain consistent 3 and 4 medians (fig. 109). Alterations to the circuit wall and the towers would also have been needed to mask the dimensional values encased in those massive structures. The analytic methodology suggests that Taşkun Kale in its terminal form did not provide a coherent spatial framework for daily life.



PART II - CONSEQUENCES

The study of Taşkun Kale has served its primary purpose by indicating that dimensional order and disorder can be identified in archaeological sites. My concern now is not so much with the specific interpretation of Taşkun Kale as with the methodological and theoretical issues which follow from the analysis.

i) Methodological

Presentation and analysis

The ambiguities for dimensions less than 1 m. and more than 8 m. suggest that a rigorous procedure for altering the class interval along the dimensional scale will be necessary. In the study of a Ghanaian settlement (Fletcher 1977: 78) progressively larger class intervals were used for larger dimensions. The intervals were set by the level of my measurement error. However, I would prefer to use a shift of class interval based on the mechanical properties of the human eye. Since the variation trend can be related to the nature of the eye as a receptor, it should be possible to devise a standard transformation of class interval based on the way in which visual perception changes with distance of view. Also involved, is the problem that different kinds of patterns may be recognizable with differing perception of grain of detail. The dimensions from a settlement should be presented using a range of class intervals to see if particular presentations display marked distribution peaks. Distinct distributions of small dimensions recognizable in a small class interval should amalgamate in a larger class interval to conform with the arrangement of the other distributions of larger dimensions.

Human beings do not use the same degree of perceptual precision for observing all the parts of their visual universe. The eye allows a continuous change of perceptual detail made up of many small increments of loss of acuity with increased observation distance. But each human group could divide up that continuum in its own way. The implication of the breaks in serial order, and their relationship to the variation trend, is that the breaks represent visual distances at which a group is making marked jumps in the degree of perceptual acuity on which its behaviour is based. We may find that one class interval will function up to such a break and must then be replaced by another interval size. All that the series break specifies is that the spatial pattern has "gone out of focus" and that a different grain of perceptual detail is needed to deal with dimensions beyond the break.

The crude methodology also points out other requirements. Statistical methods, such as Fisher's Exact test, are needed to deal with small numbers of examples, specifically with sample populations of less than five. A method is also required to avoid the undue emphasis on single dimensional values. More work has to be applied to the uncertainties surrounding any one dimensional value and the relationship of that value to the nearest aggregate of dimensions. In essence the new methodology would involve far more processing. Any one dimensional value will have to be assessed in a variety of ways, particularly in relation to class intervals. Considerable data

storage capacity and rapid analytic procedures will be essential.

An additional aid in the study of spatial patterning may come from communication theory. Once settlements are regarded as dimensional expressions of spatial messages, then the characteristics, requirements and failings of communication-systems in general may also apply to the analysis of space in settlements. This would seem a particularly fruitful research programme to pursue. Communication theory and the propositions derived from it can be expressed in mathematical and algebraic form. They should therefore be amenable to applications as a procedure for analysing settlement space.

Dealing with damage

The only estimate which can be obtained from Taşkun Kale for limit on acceptable damage is that if about 50% of the structures in a site are destroyed analysis is probably not worthwhile. Less than 50% of the original walls of the End State of the fort now survive with both corners intact. Estimates from that sample do not supply positive indications either of the dislocated pattern or of the high variation values (fig. 110). While some information can apparently survive such damage, critical parts may be lost. In addition the loss of all or most of the representatives of one type of spacing can be particularly frustrating. In Taşkun Kale only three of the ten possible outer façade lines of the circuit wall can be measured. It is this lack of data which prevents an assessment of the serial pattern beyond the 8 m. values.

The analysis of Taşkun Kale does suggest that damage can be partially rectified by consistent reconstruction. The procedure merely provides more measurable dimensions which partially relate to the original form of the site. Some uncertainty has to be accepted in order to obtain the larger sample, but this seems to be tolerable. The reconstruction leads to arrangements of dimensional order or disorder and produces these differing effects even for the same room spaces in their undivided and their segregated forms. The reconstruction procedure does not apparently favour either order or disorder. Surprisingly therefore such a policy is apparently useable. However, closer definition of the reconstruction rules will be needed since there are plainly limits of damage beyond which it would be a futile policy.

For palimpsests of features within a structure the situation is still unclear. Given that many archaeological sites are terminal occupations, which might not be displaying spatial order, we need some statement of how much ambiguity to expect. In Taşkun Kale two of the normal tandirs infringe the expected 1 m. zone around doorways and one lies within a space linking two rooms. When divided into two classes of internal and external tandirs, it is the external cases which are markedly "out of place". Taking the entire class of tandır, an estimate for how much blurring we might expect and tolerate is that if only 10% of the positionings are in the wrong place there may previously have been spatial order in the settlement.

The recognition that loss of order can be present in an archaeological site should be of assistance. When the effects of damage and selective excavation and cultural bias are added, it is not surprising

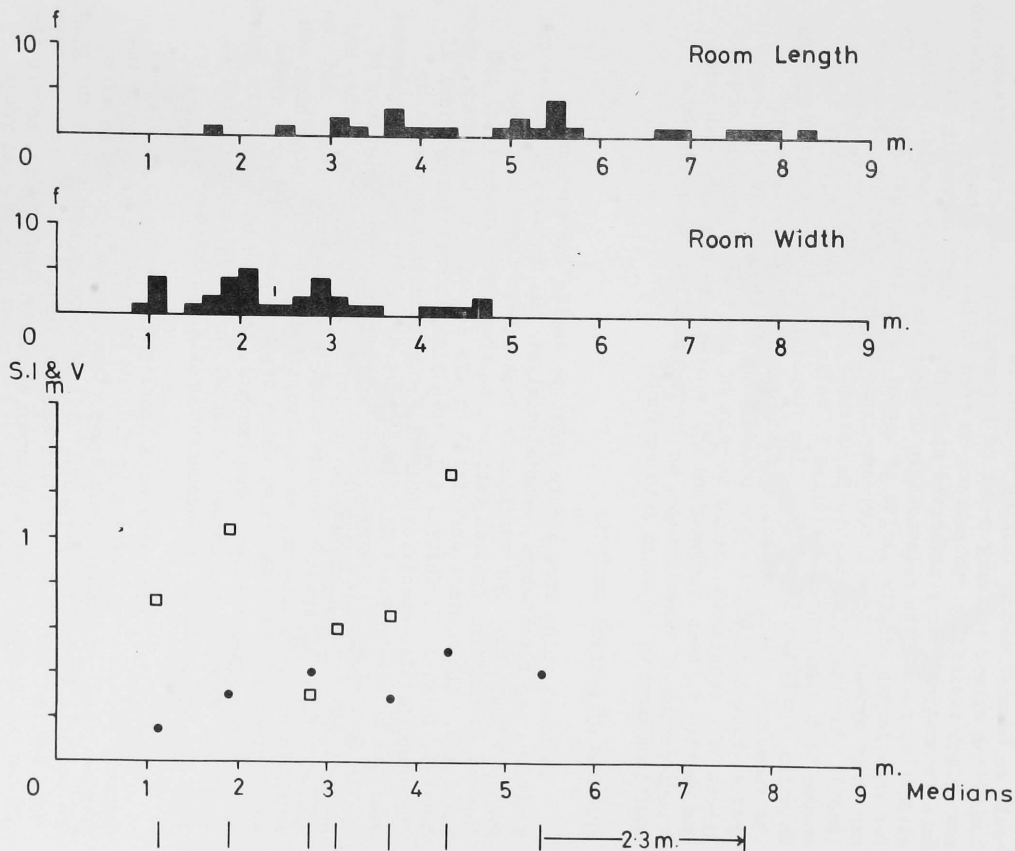


Fig. 110. Taşkun Kale. End State, <50% survival. Distributions, medians and 40% range values produced from walls with extant corners.

□ Separation values

• Variation values

that many archaeologists have failed to perceive either pattern or regularities in archaeological settlement plans. Knowing that loss of order can occur may help to reduce the agony of trying to find spatial patterns where none exist.

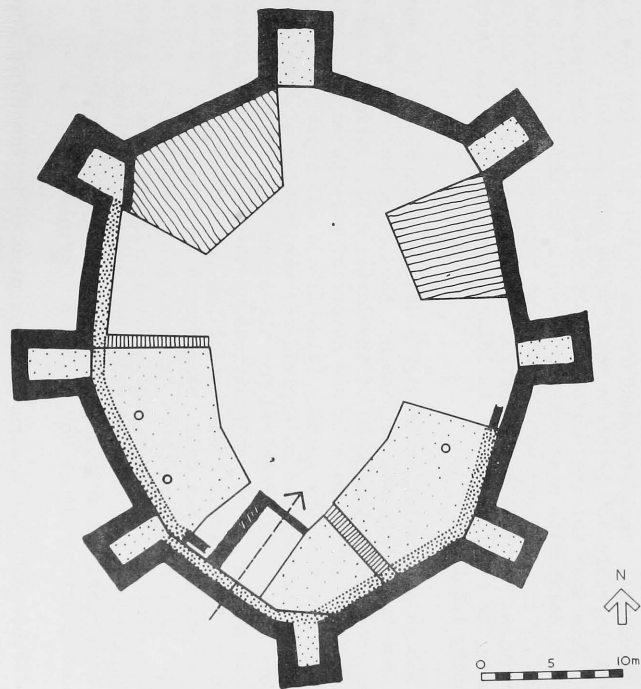
Rapid assessments

Large amounts of effort are part of spatial analysis. But the analysis of Taşkun Kale suggests that assessment of spatial behaviour could be carried out by looking at limited classes of data. Room dimensions appear to carry a lot of information. An initial assessment might fruitfully concentrate on them rather than trying to extract data from other poorly preserved spacings. A limited enquiry could attempt to pursue the relationship between the maximum median values for room length and the limits of visual range in the settlement. So far there appears to be a correspondence between these two (Fletcher 1980i). But the relationship is unlikely to be simple. We cannot assume that open spaces delimited by walls will be usual. In the Ghanaian settlement there were also identifiable visual range outside the residence units, defined by platforms, granaries, fires and graves (Fletcher 1980i). The positioning of features in the open spaces of a settlement should be part of the overall spatial order. One caution is that the terminal state of a site may have undergone a contraction of visual range, as in Taşkun Kale. Aberrant late additions have to be taken into account.

Products of spatial analysis

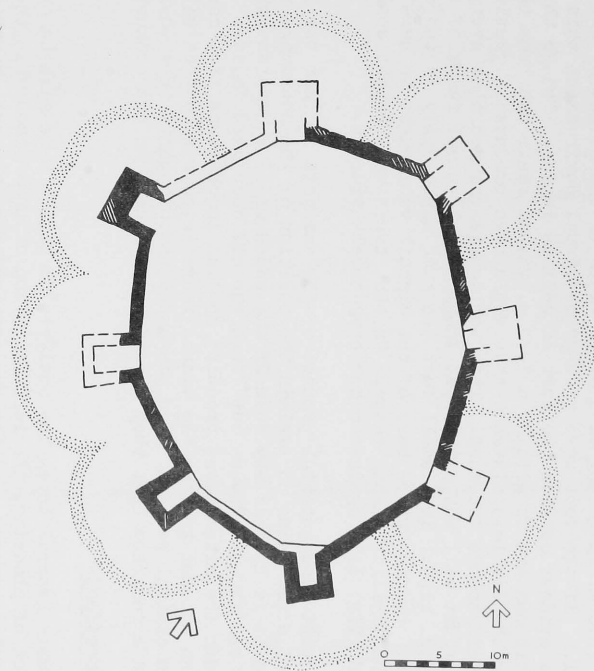
In sites which lack secure relative dating for successive additions and alterations, spatial analysis can be used to assess the possible sequence. For example, in Taşkun Kale there is no way to choose, in terms of spatial pattern, between Start State II(a) and Initial I. The minimal definition of the sequence is therefore, Start State I, Initial II, Initial III, then Final I followed by Final II. The analysis also specifies that the room subdivisions cannot be ascribed solely to Final II. Their presence early in the development of the fort makes no difference to the nature or the occurrence of spatial order. If, however, in the (b) condition all the States had lacked order, the spatial message model would suggest either that the subdivisions were late or, as is always possible, that something odd was happening. Such odd cases would deserve investigation. There are several possibilities. For example, that the site was only briefly occupied, or that considerable external force was being applied to keep the occupants in an incoherent spatial environment.

The analysis also acts as a spotlight, showing up unexpected aspects of a site or helping to clarify obscure features. For instance, the 1 m. visual break draws attention to a possible walkway on the roof behind the parapet. This in turn suggests that the tandirs may have had roof vents and that the odd feature at the rear of tower 25 can be interpreted as a buttress to carry the walkway, before the adjacent rooms were built (fig. 111). The 7.70 m. visual range indicates that the courtyard limits may have been defined by timber sheds during the early States of the fort. Suggestions of this kind, made in the field, might help to guide an excavation and could also offer assistance for pictorial reconstructions.



- | | | | |
|---|-----------------|---|----------------|
|  | Wooden shed? |  | Roof |
|  | Stairway/ladder |  | Tower platform |
|  | Walkway |  | <u>Tandir</u> |

Fig. 111 Taskun Kale. Proposed arrangement in Initial I



Towers
Schematic

Fig. 112 Taskun Kale. Visual ranges out from the towers

The 7.70 m. range may also offer clues to the height of the circuit wall. If the fort were a coherent visual environment this should be evident outside the fort as well as inside. Though the tower positions are uncertain, a 7.70 m. visual range out from the towers is the smallest distance that would have produced a continuous visual field around the fort. This would have ensured that every part of the circuit wall was within the familiar perceptual range of the guards (fig. 112). In a small fort the same might apply in the vertical plane. Points at the base of the circuit wall ought to have been within the familiar visual range. On that basis wall height could be estimated (fig. 113) against other structural evidence.

The most consequential product of the analysis is that the loss of spatial order helps to explain the position of the courtyard rooms. Otherwise it is unclear why room 22 was added where it was and why rooms 12 and 14 were "swung out" from the old courtyard façade. Even though the alterations produced spatial incoherence they can be seen as an attempt to keep the visual range in correspondence with the truncated spatial pattern. Had you asked the occupants they would as likely have remarked that they needed a new sheep pen and cookhouse!

ii) Theoretical

In more general terms the analysis of Taşkun Kale affects our definition of planning, the identification of human groups in the archaeological record, and the explanation of settlement growth and disintegration.

Planning

A description can be provided of the amount of variation occurring in a structure. That statement refers to the variation which was allowed, or could not be prevented, during construction. The fort of Taşkun Kale does not therefore directly reflect the accuracy of any survey or deliberate measurements on which the layout might have been based. It is a fallacy to suppose that because we can provide a mathematical description of a structure, the mathematics was consciously known by the creators of the building. That confuses the label with the thing labelled.

Though the variation in Taşkun Kale was lower than the variation in a user-built Konkomba settlement, the latter had over sixty enclosed spaces compared to the 30-40 of the fort. Since variation tends to increase with an increase in the number of structures the variation for Taşkun Kale is unsurprising (fig. 114i). No appeal to deliberate measurement is required to explain the variability of room size in the fort. Nor is it required for the circuit wall and towers. If the spacings between tower positions on the circuit wall are treated as members of a single distribution the population of examples does not vary any more than would be expected from the known trends (fig. 114ii). A sergeant and some garrison labour would have sufficed to build the rooms. No other professional builders need be suggested for the circuit wall and towers. The basic plan of the fort could have been paced out and judged by eye. If it was carefully measured, the construction did not do justice to the plan.

A statement that a structure was planned is therefore severely

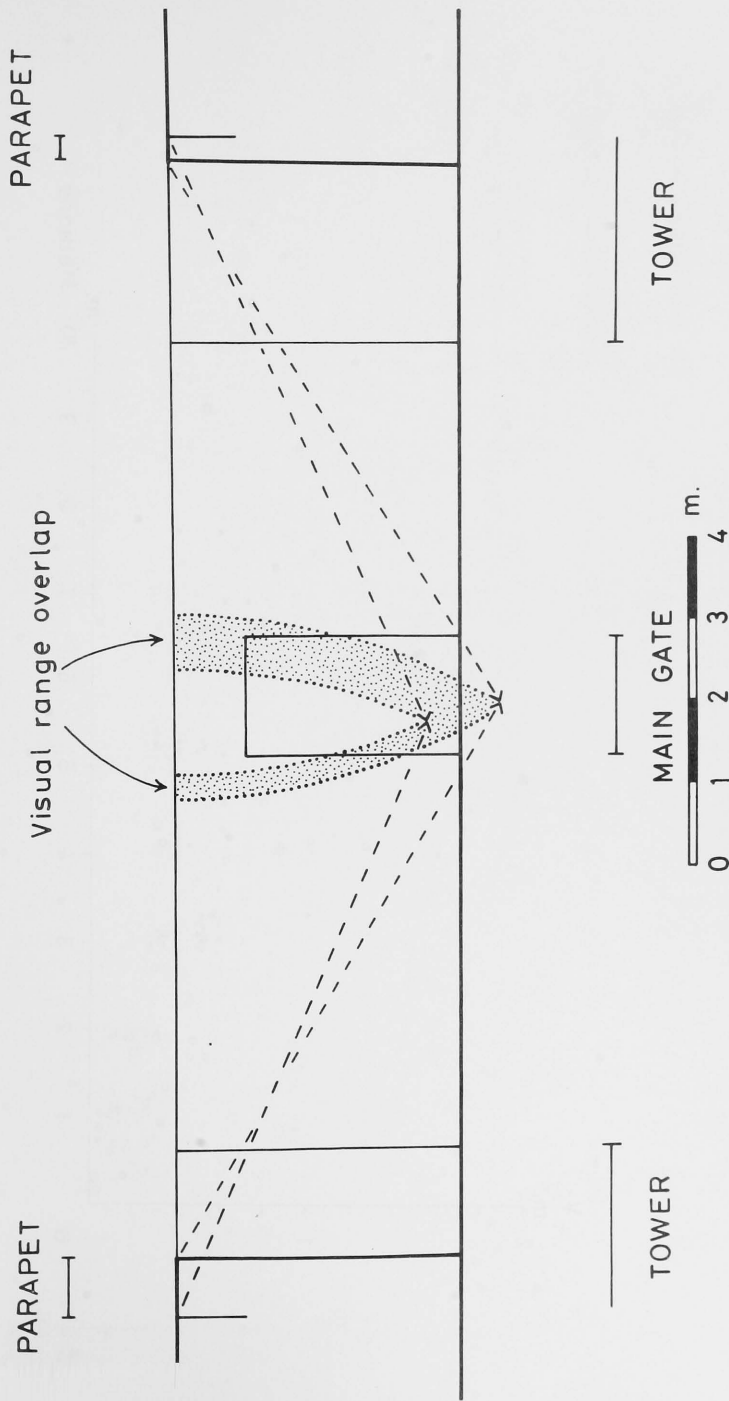


Fig. 113 Tagkun Kale. Visual ranges from tower parapets to ground level by the Main gate

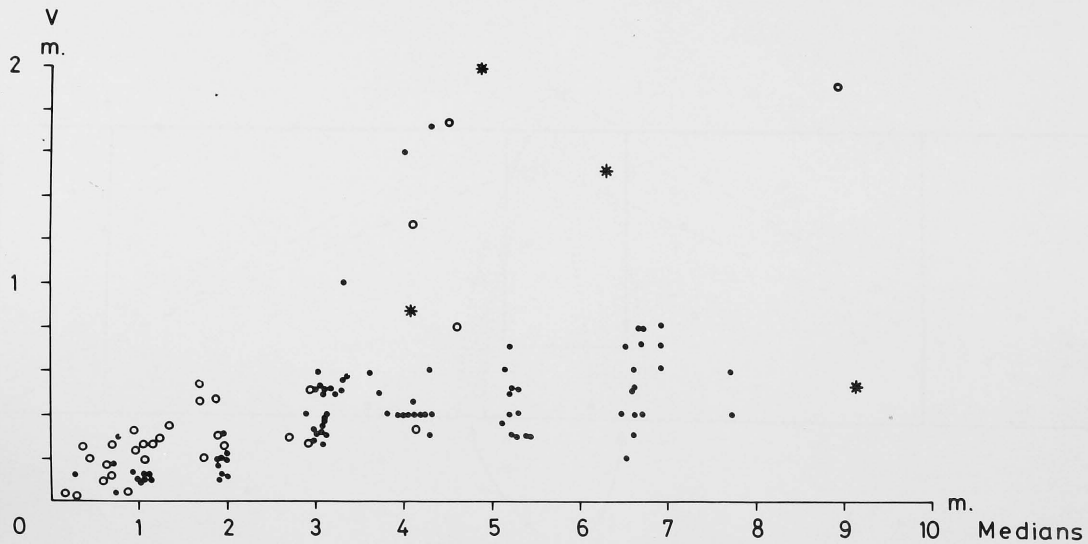


Fig. 114(i) Konkomba Set 1 ○ Taşkun Kale ●
 Konkomba Set 2 *

affected by the recognition that human beings usually produce ordered spatial environments for themselves. To describe a site as planned demands a good deal more than the assumption that someone knew what they were doing and ordered the location of each part of the structure. On such a definition every user-built settlement could be described as planned. The term should be restricted to situations in which dimensions were consciously specified and labour was sufficiently controlled to ensure that the dimensions are accurately expressed in the completed structure. What we will then require is a demonstration that some structures express dimensional precision of a kind that cannot be produced by the unaided eye.

Group identification

The alterations made to the fort, after the fire which damaged the rooms around the main gate, cannot be ascribed to a different pattern of spatial behaviour. Superficially this seems surprising. It is hard to envisage that a military garrison would continue to use an apparently decrepit fort. But the spatial analysis does not specify that they did, only that whoever did so, had a similar pattern of spatial behaviour. Several possibilities can be considered.

The fort may have been built to stand over a potentially unreliable Christian community which had been moved away from the critical ford at Aşvan (McNicoll 1973: 171 and above, Chapter 7). A non-Christian garrison from a different region may have settled into domestic life, intermarrying with the locals as Ilkhanid authority broke down in the 14th century A.D. Or a loyal Christian garrison could have been placed in the fort to control and protect the local community. But we should beware an assumption that the material component of human behaviour merely reflects social and political phenomena. If spatial behaviour were very similar over large regions of Anatolia, a Muslim garrison and a Christian community need not have been distinguishable in spatial terms. Whatever the garrison and the local community said about each other, the characteristics of spatial activity in Taşkun Kale can still be analysed and interpreted in behavioural terms. Conversely, no matter how we try to turn space into statements about social and political entities we will in the end still be describing spatial behaviour. The useful question to ask is how does an analysis of spatial behaviour affect our understanding of settlement growth and change? Space does not have to be translated into other terms to make that assessment possible.

Settlement dynamics

The two critical results of the analysis of Taşkun Kale are that "Arithmetic" type serial patterns can occur, and that settlement space appears to go through a cycle from absence of order, through order to disintegration of spatial pattern.

As I had suspected (Fletcher 1977: 108) human communities are apparently able to produce many different kinds of serial patterns. We should expect that the trend of variation can also differ for settlements of similar size. In a coherent spatial environment the slope and start value of the variation trend is related to the serial pattern. If the series intervals increase very rapidly or the jumps

at the series breaks are substantial, then the variation trend can rise steeply.

Given all these possible differences we should find that there has been preferential selection by group behaviour (Fletcher 1980ii) and by general circumstances (Fletcher 1977: 137-139) for some, rather than other, spatial patterns. For example, patterns with high variation values might tend to persist longer because they could facilitate shifts to alternative spatial arrangements. A Fibonacci type series could be particularly effective for dividing up space because of the many possible dimensional combinations which it allows. An alternative option is that the marked discontinuous jumps necessary in an Arithmetic type series may be effective in some circumstances because they unambiguously arrange behaviour into discrete spatial sectors.

Dimensional patterns should constrain the stability, rate and nature of change in settlement layout. Low variation would tend to operate against rapid coherent change. But a high level of variation carries the risk that replication will increase so rapidly that spatial order would be lost.

In Taşkun Kale the central tendencies appear to be generally more stable than the variation values. Mechanically this is to be expected. To get rid of a central tendency demands either the removal or concealment of the existing dimensions. Furthermore, each component of the series will usually be represented by central tendencies from several types of spacings. To shift the median of such a cluster without losing pattern coherence would require alterations to many functionally unrelated entities. By contrast, variation can increase simply by the addition of new features whose dimensions are at the periphery of an existing distribution. We seem to be dealing with a replication system, carrying a considerably amount of redundancy, which tends towards maintaining itself over time but is also liable, due to copying changes, to produce new ordered patterns or else to lose message coherence.

The cycle of spatial arrangement which occurs during the existence of a settlement is the product of a local process of entropy, the growth of undifferentiated chaos, due to the cumulative effects of a succession of small events. That entropy can be reversed either by starting a new spatial arrangement elsewhere, or by the input of sufficient energy to remove most of the older spatial format.

In essence, the cycle will occur unless energy is expended to control the changes occurring at any one time. Variation increase can occur because of relatively few new structural additions. But gradual decay and demolition will primarily be affecting the older structures. Dimensions will be deleted regardless of the coherence of the older spatial message. While the adults may remember what the settlement was like, the children will only perceive what is actually there. If the behaviour of children is influenced by their spatial context (Aiello & Aiello 1973), then they would tend to replicate what is there. Spatial disorder would continue to increase. A meticulous editing of old structures might help to retain a tolerable spatial environment. But the editing process is governed by the social, political workings of the community not by any conscious perception of the spatial message involved.

Rather than being a reflection of social/political institutions,

the consequences of the development of a settlement would appear to result from dissonance between the daily operations of a community and the nature of its built spatial environment. Plainly, the demands of politics can lead to housing disasters (Newman 1972). We have been confusing two levels of interpretation. Any one structure may relate to social/political activities. But the cumulative effect of many such events follows from behavioural needs for spatial coherence and tolerable amounts of interaction (Fletcher 1980ii). If these requirements are absent sustained community life should become impossible.

According to this thesis settlements will have a finite existence even without the intervention of outside factors like attack or resource failure. Indeed it may be that some kinds of spatial arrangement so adversely affect group behaviour that the community becomes particularly vulnerable to such dislocations (Fletcher 1980ii). The specific expression in any one community of the effects of spatial arrangements which are behaviourally disturbing will depend upon the social and political characteristics of the group. That some kind of action will occur leading either to drastic rearrangements or to the abandoning of the settlement follows from the proposed parameters of spatial behaviour.

Loss of spatial order and the ability to identify it in settlements therefore becomes of some consequence. If we can identify loss of spatial order we may then begin to assess how the material behaviour of communities change in such circumstances. We need to know what a failing community looks like. At present we only know that failure has finally, irretrievably occurred. Studies of short term states in occupied settlements and analyses in the archaeological record of long term occupation, will be complementary.

How long can a community tolerate spatial incoherence? If the tolerance can last for decades without improvement of spatial order then plainly that behavioural parameter would be of little consequence. That human beings can be kept in spatially intolerable circumstances should come as no surprise. But two other factors attend. External force needs to be applied and the confined population is usually transient due to death, termination of contract or release from captivity. The twentieth century A.D. with its concentration camps, military bases, labour camps and detention centres provides a saddening host of examples. The period of tolerance for relatively unconstrained communities should be short. We need to know what kinds of spatial patterns are likely to throw up sufficient variants for a community to be able to shift to a new coherent pattern within a short time.

Developing a sophisticated methodology to deal with these questions would seem to be worthwhile. Using the method to describe diverse settlement forms and changes we could begin to explain, within the spatial message model, how and why settlements are altered or abandoned.

Conclusions

The analysis of Taşkun Kale has been used to show that a methodology can be devised which identifies both the presence and the absence of spatial order in settlements. Several consequences follow from the analysis. These suggest that attempts to devise a more sophisticated methodology are necessary and will be worthwhile. We may be able to

make use of the theory, mathematical description and procedures of communication theory to deal with spatial messages. The issues to be pursued involve the effect of structural alterations on community life and the liabilities of rapid spatial change. We need to know more about the many kinds of spatial patterns which can occur, in particular the way in which they affect rates of spatial change. These will be of some relevance for our understanding of the persistence and abandonment of settlements. The spatial message model suggests that settlements will tend to go through a cycle from under-representation of spatial pattern, to the occurrence of spatial order and then eventually to loss of spatial coherence. This cycle should vary in rate and intensity for different kinds of spatial patterns. If the nature of spatial order affects the workings of community life then it is possible that the analysis of spatial messages will help us to gain some further insight into the persistence, mobility and demise of human communities.

APPENDIX I

SUMMARY OF THE ARCHITECTURAL DEVELOPMENT OF THE
LATE MEDIEVAL FORTRESS

by Roland Fletcher

- Start State I - Main gate complex and room wing on west side of courtyard as far as proposed staircase.
Indicators: (1) the line of the wall frontage from 2 to 32 forms a continuous in-line façade.
(2) the staircase indicates that the west wing once ended at that point.
- Start State II - Above plus 30, 28/29.
- III - Above plus 26/27, 23/24.
Indicators: A possible development because the west wing could have been entirely completed before the east wing and the infilling by rooms 21, 20, 19 between the two wings.
- Initial State I - Main gate complex and room wings on the west and east sides of the courtyard as far as the north wall of 32 and the north wall of 10/11.
Indicator: Possible plan symmetry.
- Initial State II - Above plus 30, 28/29 and 13, 15/16.
Indicator: Possible plan symmetry.
- Initial State III - Above plus 26/27, 23/24 and 17 and 18.
Indicator: Possible plan symmetry.
Note that rooms 21, 20 and 19 lie between an abutment on to the north facing wall of 18 and the east facing wall of 23/24. The latter is not in a continuous line with the courtyard façade of the west wing but produces an offset - a possible indicator of some time interval between the construction of 23/24 and 21.
- Final State I - Addition of 21, 20, 19.
Indicators: See above.
- Final State II - Addition of 6, 12, 14 and 22; and alterations to Main Gate complex (note that in this state the altered room space 1 is part of both Conditions (a) and (b)). Final State II (b) is the last state of both the (a) and (b) series.

Indicators: The main argument for this as the last addition is that all these rooms are built in the courtyard space. While it is mechanically possible that the additions to the east wing could have been made before the courtyard was completely enclosed by rooms, the radical nature of the changes argues against that case. Prior to the additions and alterations ascribed to this State, the fort would have displayed a rigorous and consistent plan. It seems unlikely that the symmetry of the circuit rooms would have been completed after the overall symmetry had been broken by the courtyard additions. Furthermore, the form of room 6 is inevitably involved in the radical alterations to the Main Gate complex, alterations so extreme that they completely alter the access to the lateral passages on either side of the main gate and tower room.

The tandirs in the entry to 36, by the new door to 4 and in the gap to 5 follow the alterations to this area because they are located on the positions of earlier structural features.

APPENDIX 2

AMBIGUITIES AND CONFUSIONS RELATING TO THE ARCHITECTURE OF THE FORTRESS

by Roland Fletcher

Previous occupations

The southern portion of the site was levelled to construct the fort. As a result walls and hearths of earlier occupation deposits lie immediately on the surface in the courtyard and in some rooms. I have worked on the basis of the cultural chronological data given me by Tony McNicoll. One ambiguous case is the off-angle fragment of walling between 28 and 26 and the features in the floors of 32 and 12. I have excluded all these ambiguous features from my analysis.

Damage and alterations

There are a small number of features in the site about which ad hoc decisions have to be made. Commencing at the Main gate these are:

- 1 - The precise form of the original inner end of the gate access is unknown. Two forms are possible. The simple form would open directly in to the courtyard. An alternative would be to have some kind of inner gate as well. Possible candidates for the jambs of this door are the large slabs that were used in the altered entry to 4. I have used these two blocks to obtain estimates of length for 1 with an inner gate. In the data presentation alternative values are given for these different versions of the gate access.
- 5 - Has a remnant of a cross wall foundation. It is my personal opinion, not necessarily supported by the excavator, that this narrow room once contained a stairway held up by the cross wall. I have presumed that the rear space under the proposed stairway was accessible. There is a door socket stone in the north wall of 5.
- 16 - A small spur of masonry on the south wall was in a ruinous condition when excavated. I have not considered it as the remnants of a wall - nor does the excavator. Its structural role is uncertain.
- 22 - Excluded from the Final II and End State descriptions of room length and width because it is polygonal and no distinction of length and width is possible. Its dimensions are presented as a separate distribution.
- 25, 26, The wall arrangements in this area are very difficult to
28 - clarify. A case could perhaps be made for projecting the line of the wall between 28 and 26 into line with the south outer face of tower 25. The wall layout I have reconstructed for the NW corner of 28 has no justification other than its

consistency with the reconstruction procedure. It is impossible to precisely define a structure at the junction of 28, 26 and 25.

- 30 - Along the south wall is a foundation which extends from the courtyard wall into the N-S baulk. Somewhere in that baulk it appears to end. Though certainly part of the fort is unlike the other wall foundations. This structure may be the remains of an early staircase that was removed when room 30 was built. The measurement of the room disregards the presence of the foundation. I have however treated the gap through the courtyard wall as a doorway in Final II and the End State.

Possible altered walling

Some features could have existed in other forms early in the development of the fort. As pointed out above I have not taken such possibilities into account because no firm evidence exists upon which to make such particular decisions. I have noted the possible alterations in case they will have some meaning to other researchers.

- 2 - North wall. Though I regard this as part of the Start State there is a possibility that at some time it was removed to produce a room extending to the north wall of 4. The indication of such a change is the offset which delimits the original door into 4 from the courtyard.
- 25 - South wall. Did this wall in an original form run in line with the courtyard façade of 24? The existing south wall of 21 could be an alteration associated with 22.
- 32 - North wall. One of the most irregular walls in the fort. In the Start State there may have been some other wall arrangement associated with the proposed stairway.

There is a problem of where and whether there were towers on the North and Eastern sides of the fort. The hill slopes down steeply on both these sides of the fort. Either the towers were unnecessary, or they have disappeared because of slumping and erosion.

The fort is an egg-shaped polygon with the extant towers located at the corners. Three of these towers, 3, 35 and 31, have doorway access at ground level. Tower 25 may have been open to the courtyard in its early form but a later access may have been provided from room 28. For 3, 31 and 25 the rear face of the tower forms a facet on the inner face of the circuit wall. Similar facets also occur in 18 and 21. In 9 there is a similar short piece of wall line, created by the offset of the transverse wall from the corner of the circuit wall. The access to tower 35 is next to a slight curve of the inner face of the circuit wall. This curve results from the junction of the wall alignment at the rear of 36 and the line of the wall along the back of 34. A similar corner occurs in room 16 from the extrapolation of the rear walls of 13 and 16.

The only apparent function of the facets on the inner face of

the circuit wall is to provide a short piece of wall to carry the door access to a tower room. While the facets in 21 and 18 might have been intended for towers that were never built, it is hard to see why the offset of the transverse wall in 9 was made, unless access to a tower was being provided. The circuit wall features in 16 are the same as the features associated with the tower off room 34.

It might be argued that the steep slopes obviated the need for towers. But there is no specific justification for an argument that towers were not built on the North and East portions of the circuit wall.

APPENDIX 3

THE INSCRIPTIONS

by Sebastian Brock

(fig. 115)

1. The following is the most likely reading:

npq [mn]	'There departed [from]
'lm[' hn']	[this w]orld
ml' ['qt' /šhq' br]	full [of griefs/vexation Bar-]
šwm'	šawma

Funerary formulae of this type,¹ beginning npq mn 'lm' hn' ml', are best attested for the 10th - 13th centuries, and mostly come from Tur 'Abdin (SE Turkey). The following three formulas are most commonly encountered:

- (a) npaq men 'ālmā hānā + w-šanni lwāt māreh, 'there departed from this world + and he left (to go) to his Lord';²
- (b) npaq men 'ālmā hānā + mlē 'āgātā + w-šanni lwāt māreh 'there departed from this world + full of griefs + and he left (to go) to his Lord';³
- (c) as (b), put with mlē šhāqā, 'full of vexation', as the second element.⁴

In the case of the present inscription there would seem to be two possibilities: (i) it originally contained the full formula (b) or (c), in which case line 3 will have been considerably longer than lines 1 and 2, reading ml' ['qt' /šhq' wšny lwt mrh br]; or (ii) it provided a new variant to the formula, omitting wšny lwt mrh.

1. Contrast the very different formulae from e.g. the Urmi area (R. Duval, Journal Asiatique VIII.5 (1885), 39-62; 7th - 8th century), and Central Asia (published by Chwolson; 9th - 14th century).
2. Thus H. Pognon, Inscriptions sémitiques de la Syrie, de la Mésopotamie et de la région de Mossoul (Paris 1907), nos 22, 29, 65, 67, 114; J. Jarry, 'Inscriptions syriaques et arabes inédites du Tur 'Abdin', Annales Islamologiques 10 (1972), 207-50, nos 11 (misread by Jarry) and 44). These are from Ṣalah, Ḥaḥ, Hashtarak and Arnas.
3. Pognon nos 66, 69, 70, 71, 95, (106), 112, 116; Jarry no. 23. From Ṣalah, Ḥaḥ and Hashtarak.
4. Pognon nos 23, 24, 27, 28, 30-32. All from Ṣalah.

The preserved letters of the well-formed estrangelo script do not include any clear pointers which might help date this very conservative script. A date contemporary with the Tur 'Abdin examples of the general formula would seem probable, i.e. 10th - 13th century, but in view of the paucity of comparative materials, too much weight should not be laid upon this assumption.

The diacritical points which feature here under npaq and mlē also occur in Pognon no. 70 (13th century).

2. This appears to be Armenian (bolongir script):

ḥ ọ ỵ a [

The first three letters, especially the ho, are very uncertain; if the reading is correct, one might suggest hova[ly] 'alas'.

3. Conceivably the first two lines could be read as Syriac letters (serto script):

ỵ ḷ p̣ [

g [

4. This inscription is in the Aramaic script of the late Parthian period designated by Naveh¹ as 'North Mesopotamian'; other examples of the script come from Dura Europos, Hatra, Tur 'Abdin, Armenia (Garni) and Georgia (Armazi).

The fragment would appear to read:

100 ẓ ṇ/ḳ ỵ ṭ

It should be stressed that, apart from the numeral, the reading is very tentative; if zkyt were correct, it could be translated 'I conquered'.

The 100 sign, with the extension of the base of the triangle to the right, is unusual, but not without parallel (see Naveh, p. 301, fig. 5). The letters to the left of the numeral may be compared to the Hasn Kef inscription (Pognon no. 61), especially for the shape of the zayin. According to Naveh the hooked zayin comes late in the sequence (see his fig. 4), and he places the Hasn Kef inscription later than that from Sari (Pognon no. 60), whose date has been read as 147 (Maricq, Pirenne) or (better) as 547 (Pognon, Naveh), presumably of the Seleucid era, i.e. 166/5 B.C. or A.D. 235/6. In all likelihood the present inscription should be dated to approximately the same period as these two Tur 'Abdin inscriptions. Its interest lies chiefly in the fact that it serves as a new witness to the geographical extent of the 'North Mesopotamian' Aramaic script.

1. J. Naveh, 'The North Mesopotamian Aramaic Script in the late Parthian period', Israel Oriental Studies 2 (1972), 293-304.

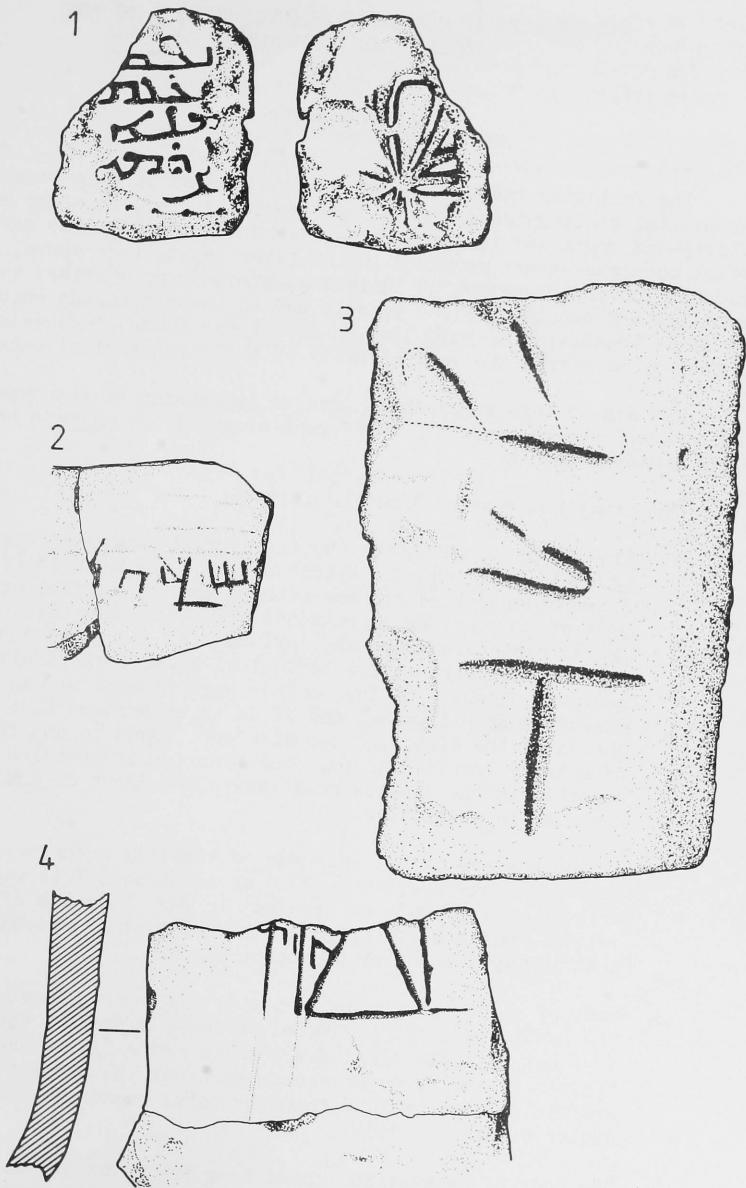


Fig. 115 Inscriptions from Taşkun Kale

APPENDIX 4

OCCURRENCES OF SHAPES OF CERAMIC VESSELS IN THE FORTRESS OF TAŞKUN KALE

by Jon Hosking

The following tables show all occurrences of ceramic vessel shapes (as distinguished in the 'type series') found in eight of the thirty-six rooms and in two sectors of the courtyard of the fortress. These occurrences are recorded in the layer sheets (see above, p. 55); recognition and recording of individual pieces were confined to the complete and nearly complete vessels and to the rim sherds which could be identified as belonging to particular forms of vessels. The latter group formed the vast majority of the 'type series' catalogue.

The aim of this study is to give an impression of the types and numbers of vessels present in different areas of the kale in the two late medieval phases.

The study has several limiting factors:

1. The extent to which the shapes recorded represent the vessels actually used, and the extent to which the quantities of fragments recorded represent the number of vessels originally present, are unclear. Fragments of pottery may move considerable distances under the influence of the usual destructive forces which work on archaeological sites; the shallow late medieval deposits at Taşkun Kale were in some places badly disturbed by ploughing, and it is to be assumed that the sherds of the disturbed deposits were moved to and fro to a greater or lesser degree. Some blurring is therefore to be expected in the results relating to the Phase II and topsoil deposits in particular.
2. Although every effort was made of identify fragments of the same pot, some sherds recorded as comparanda both within and without a given room or area may in fact be parts of the same vessel. Misidentification of this sort would increase artificially the number of pots present.
3. Some of the rooms straddled the grid lines. Since many of the baulks were not excavated, a large number of the rooms were not entirely cleared. Thus in rooms 2/4, 6 and 8, the figures given for occurrences represent the product of an artificial area, rather than the total number of identifiable sherds within the room.
4. The mode of excavation varied from trench to trench. The digging of the southern trenches (encompassing rooms 2-8 in this study) was more meticulous than that of the northern trenches (rooms 30 and 32 in this study). This was the result of the different goals of the 1970-1 seasons and the 1973 season. The different style of digging may have affected

the quantities of all materials recovered. This in turn would affect the numbers given in this study.

5. The depth of the plough line varied from place to place on the kale. This would also have an effect on numbers of sherds. In the open courtyard area the plough bit deeper and caused more disturbance than in the walled areas.
6. In some trenches topsoil was taken off over more than one room. Obviously the sherds from such topsoil areas cannot be allocated to specific rooms.

Room	Unglazed					Glazed				
	St. J. St. B.	W. J.	T. Oven	C. V. Cook Bowl	Plate Lid	Pipe	Tile Lamp	Bowl	Plate	
2/4	2	4	3	5	7	2	1			5
5	1 1	1 2	1	1 1	1	1	1			2 2
6	6 3	7 3	1	9 2	14 4	4 1	1	1		12 3 2
7	2	6 3	1	8	5	2		1		4 2
8	2	4 2		1	1 2	3				3 1 3
30	2 9	9 6	1	1 4	8	3				2 10
32	3 8	7 5	2	3 6	1 10	2 5				5 1 2
c/y	3 1	1 1	1 1	3 3	5	3 1				3 8 1

Fig. 116 Distribution of pottery rim-sherds and complete vessels defined by function (above, pp. 56-60)



ROOM NO: 2 and 4

TRENCH NO: S11 (AREA 203)

Numbers in columns refer to catalogue entre (CN)

KALE PHASE & LAYER NO:	Unglazed											Glazed			
	St.J.	St.B.	W.J.	Ser. T.	Oven	C.V.	Cook	Bowl	Plate	Lid	Pipe	Tile	Lamp	Bowl	Plate
II															
203.1															
203.2															
203.3				4217 4428											59
203.4						4028 4327 4308									59 110
203.9															
203.10						4043 4208									151
203.11															
203.12				4445											
203.17				4446											
203.18								4013							31
TOTAL KP II				4		5		7						5	
I															
203.6															
203.7	4145 4135			4086 4433 4197				4013 4307 4431		4240 4114	4434				35 39
203.8															
203.13															31

	203.14												35
	203.14												142
TOTAL KP I	2		3					3		2	1		5
	2		3					3		2	1		5
TOTAL KP I + II	2		7			5		10		2	1		10

Fig. 117 Distribution of pottery rim-sherds and complete vessels.

ROOM NO: 5

TRENCH NO: S11 (Area 202)

Numbers in columns refer to catalogue entries (CN)

	St.J.	St.B.	W.J.	Ser. T.	Oven	C.V.	Unglazed			Glazed				
							B. Cook	Bowl	Plate	Lid	Pipe	Tile	Lamp	Bowl
KALE PHASE & LAYER NO:														
II														
202.3														
202.4						4253								
202.5														
202.7	4286								4442					
202.12		4273												
202.14														
202.15														
TOTAL KP II	1	1				1			1					2
I														
202.8										4201				
202.9	4065	4355									4434			
202.11		4109				4246								

Cont. p. 254

TOTAL KP I
TOTAL KP I + II

								PHASE	I	202.4		110
1	2			1					II	202.8		28
												2
												150
												2
2	3			2		1		1	1			4

Fig. 118 Distribution of pottery rim-sherds and complete vessels

ROOM NO: 6

TRENCH NO: S11 (Area 205)

Numbers in columns refer to catalogue entries (CN)

Unglazed

Glazed

KALE PHASE & LAYER NO:	St.J.	St.B.	W.J.	Ser.			B.			Lid	Pipe	Tile	Lamp	Bowl	Plate
				T.	Oven	C.V.	Cook	Bowl	Plate						
II															
205.1															
205.2	4430	4084				4032		4013		4275			(glazed)		
						4028		4083		4261			145	5	
								4037		4201				35	
205.3	4254		4244			4276		4342						59	
	4119							4013						5	
205.6	4315	4981	4005			4439		4083		4434				91	
	4054	4355	4197			4028		4013						132	
		4438	4197			4120		4228						54	
		4109				4146		4327						126	
						4439		4184						39	
								4099						46	
205.8	4288	4174	4005			4253		4012							
								4013		4141A					110

			4086 4490				4083					149	
205.12													
TOTAL KP II	6	6	7			9	14		4	1		1	12
205.4			4289				4155 4177 4099		4141			205.4	Jar glazed 139
205.5													
205.7						4032 4120							
205.9	4055 4065 4288	4224	4030 4197				4011					91 127	46
205.10		4100											
205.11													
205.13													
205.14													154 2
TOTAL KP I	3	2	3			2	4		1			3	2
TOTAL KP I + II	9	8	10			11	18		5	1		1	15

Fig. 119 Distribution of pottery rim-sherds and complete vessels

ROOM NO: 7

TRENCH NO. S11 (Area 204)

Numbers in columns refer to catalogue entries (CN)

Unglazed

Glazed

KALE PHASE & LAYER NO:	Ser.			B.											
	St.J.	St.B.	W.J.	T.	Oven	C.V.	Cook	Bowl	Plate	Lid	Pipe	Tile	Lamp	Bowl	Plate
II															

I

204.1
 204.2
 204.3
 204.4
 204.5
 204.6
 204.7
 204.8
 204.9
 204.10
 204.11

					4027	4296						110	
		4067 4275	4197 4435									91	
					4322							16	
	4436	4267 4055			4237	4311 4437 4307 4296					Glazed 66	91	148
	4055	4100	4197		4312 4237 4092 4441 4042								54
		4449						4141A 4142					
TOTAL KP I	2	6	3		T 8	5		2			1	4	2
TOTAL KP I + II	2	6	3		8	5		2			1 Glazed lamp	4	2

Fig. 120 Distribution of pottery rim-sherds and complete vessels

ROOM NO: 8

TRENCH NO: S11 (Area 201)

Numbers in columns refer to catalogue entry (CN)

KALE PHASE & LAYER NO:	Unglazed										Glazed				
	St.J.	St.B.	W.J.	Serv.			B.			Lid	Pipe	Tile	Lamp	Bowl	Plate
				T.	Oven	C.V.	Cook	Bowl	Plate						
II 201.5								4426						31 91 126	
TOTAL KP II								1						3	
I 201.6		4303 4084	4378							4427					
201.7										4430					
201.8															
201.9															
201.11															
201.12						4101									148
201.13		4059									4194			35	27
201.14		4074	4197					4443							59
201.15	4060														
201.16								4083							
201.17	4317														
TOTAL KP I	2	4	2			1		2		3				1	3
TOTAL KP I + II	2	4	2			1		2		3				4	3

Fig. 121 Distribution of pottery rim-sherds and complete vessels

ROOM NO: 30

TRENCH NO: R10 (Area 1303)
Q10 E (Area 1801)

Numbers in columns refer to catalogue entry (CN)

		Unglazed											Glazed			
		T.			B.											
		St.J.	St.B.	W.J.	Ser.	Oven	C.V.	Cook	Bowl	Plate	Lid	Pipe	Tile	Lamp	Bowl	Plate
KALE PHASE & LAYER NO:																
II	1303.1	4060					4092								33	
	1801.5	4060													5	
TOTAL KP II		2					1								2	
I	1801.6	4298 4068	4077	4005					4184 4327 4328						2 2 2 2 5	
	1801.7			4178					4099						45	
	1801.8		4235												2	
	1801.9	4315		4005											2	
	1801.10			4179					4319						39	
	1801.11			4148					4320							
	1303.2	4065	4081 4084 4235	4005			4146		4140 4213		4278					
	1303.3	4286 4056 4239	4205 4183				4092 4042				4088 4189				6	
	1303.4	4059	4077													
	1303.5	4153	4077				4032								8	
TOTAL KP I		9	9	6			4		8		3				10	

TOTAL KP I + II

11	9	6		5	8	3						2
----	---	---	--	---	---	---	--	--	--	--	--	---

Fig. 122 Distribution of pottery rim-sherds and complete vessels

ROOM NO: 32

TRENCH NO: R10 (Area 1302)
Q 10 E (Area 1805)

Numbers in columns refer to catalogue entry (CN)

		Unglazed										Glazed				
		T.					B.									
		St.J.	St.B.	W.J.	Ser.	Oven	C.V.	Cook	Bowl	Plate	Lid	Pipe	Tile	Lamp	Bowl	Plate
KALE PHASE & LAYER NO:																
II	1302.1	4316	4168				4156				4088				12	
		4054	4084				4203				4141				12	
	1302.2	4060	4081						4118						80	17
															10	
															45	
TOTAL KP II		3	3				3		1		2				5	1
I	1302.3		4077	4197					4096						82	
	1302.4	4060	4218			T			4196							
		4063							4118		4088					
	1302.5			4284					4015							
									4230						12	
	1302.6	4110	4084						4184						10	
									4213						12	
	1302.8															
	1302.9	4318														

Cont. p. 260

259

1302.10	4160 4110	4224 4183 4273	4148 4001		4247	4018 4083	4189 4272							
1302.11														
1302.12														
1302.13														
1302.14				T	4308 4293	4307	4309	4088						
1302.15														
1805.1	4182	4235			4246	4213		4114				5 2	27	
1805.2	4239		4260									41	8	
TOTAL KP I	8	7	5		2	6		11	1	5			6	2
TOTAL KP I + II	11	10	5		2	9		12	1	7			11	3

Fig. 123 Distribution of pottery rim-sherds and complete vessels

ROOM NO: Courtyard - South sector

TRENCH NO: S11 (Area 207)

Numbers in columns refer to catalogue entry (CN)

KALE PHASE & LAYER NO:	Unglazed										Glazed					
	St.J.	St.B.	W.J.	T.			B.				Pipe	Tile	Lamp	Bowl Plate		
				Ser.	Oven	C.V.	Cook	Bowl	Plate	Lid						
II 207.1	4060 4054 4430		4086		X	4312 4312 4276					4141a 4141 4430a				39 108 59	
TOTAL KP II	3		1			3					3				3	

I

207.2
207.3
207.4
207.5
207.6
207.7
604.1

	4109				4418	4082	414a				39		
		4005									133		
											118		
4069				X	4032 4041	4012 4013 4014 4015					5 9 18 6 6	1	
TOTAL KP I	1	1	1		1	3		5		1		8	1
TOTAL KP I + II	4	1	2			6		5		4		11	1

Fig. 126 Distribution of pottery rim-sherds and complete vessels

POTTERY CONCORDANCE

Concordance of Taşkun Kale Catalogue Numbers (CN) and Figure (Fig.) Numbers (No.) in this publication.

EB Early Bronze
 NP Not Published
 ND Not Drawn
 bs body sherd

1. Glazed sherds

CN	Fig., No.	CN	Fig., No	CN	Fig., No.
1	28, 3	37	34, 79	80	28, 13
2	33, 65;]	38	NP	81	bs - NP
	33, 69]	39	30, 28	82	33, 75
3	28, 10	40	38, 119	83-87	bs - NP
4	29, 20	41	bs - NP	88	37, 12
5	29, 15;]	42	32, 59	89	37, 104
	29, 16]	43	31, 51	90	bs - ND
6	33, 67	44	32, 54	91	33, 64
7	28, 7;]	45	30, 34	92	bs - NP
	35, 85]	46	31, 43	93	34, 81
8	28, 9;]	47	35, 88	94	37, 106
	39, 122]	48	35, 87	95	NP
9	31, 39	49	30, 37	96	32, 61
10	30, 24;]	50	30, 33	97	29, 21
	30, 25;]	51	bs - NP	98	39, 135
	30, 26]	52	bs - NP	99	28, 11
11	33, 70	53	31, 38	100	37, 108
12	29, 19	54	32, 57	101	38, 116
13	28, 4	55	ND	102	33, 71
14	39, 121	56	37, 113	103	35, 91
15	NP	57	ND	104	ND
16	28, 6	58	37, 109	105	ND
16a	40, 138	59	29, 17	106	39, 132
17	32, 58	60	ND	107	32, 60
18	NP	61	ND	108	29, 23
19	36, 93	62	ND	109	39, 133
20	36, 98	63	35, 90	110	30, 29
21	37, 110	64	28, 13	111	bs - NP
22	36, 95	65	ND	112	38, 117
23	36, 96	66	39, 127	113	31, 41
24	36, 97	67	36, 101	114	36, 99
25	36, 94	68	ND	115	30, 27
26	36, 92	69	37, 107	116	39, 129
27	31, 42	70	39, 126	117	bs - NP
28	34, 77	71	ND	118	28, 1;]
29	36, 100	72	bs - NP		28, 8]
30	35, 86	73	bs - NP	119	31, 44
31	30, 30	74	39, 130	120	34, 82
32	30, 32	75	bs - NP	121	31, 48
33	33, 63	76	bs - NP	122	39, 124
34	38, 115	77	28, 5	123	38, 118
35	30, 36	78	31, 50	124	29, 22;]
36	37, 105	79	37, 103		39, 123]

CN	Fig., No.	CN	Fig., No.	CN	Fig., No.
		<u>2. Unglazed sherds</u>			
125	37, 102			4050	NP
126	28, 12;] 30, 35]	4001	51, 40	4051	NP
127	29, 18	4002	54, 63	4052	75, 216
128	33, 66	4003	51, 41	4053	48, 24
129	39, 125	4004	51, 46	4054	46, 20
130	31, 40	4005	L16-NP	4055	67, 163
131	31, 47;] 38, 114a]	4006	80, 274	4056	NP
132	NP	4007	80, 272	4057	EB - NP
133	28, 2	4008	59, 96	4058	NP
134	39, 136	4009	64, 132	4059	NP
135	39, 134	4010	EB - NP	4060	46, 17
136	39, 131	4011	64, 130	4061	67, 165
137	31, 49	4012	63, 123	4062	NP
138	bs - NP	4013	64, 131;] 64, 128]	4063	44, 14
139	35, 84;] 37, 111]	4014	64, 133	4064	44, 13
140	34, 83	4015	62, 112	4065	68, 170
141	NP	4016	NP	4066	50, 33] 42, 7]
142	31, 45	4017	L16-ND	4067	50, 31
143	35, 89	4018	L16-ND	4068	67, 164
144	33, 74	4019	86, 4	4069	68, 166
145	38, 114	4020	78, 248	4070	46, 27
146	33, 76	4021	78, 249	4071	50, 38
147	29, 14	4022	57, 82	4072	NP
148	32, 53;] 32, 55]	4023	68, 169	4073	79, 262
149	32, 52	4024	NP	4074	78, 255/9
150	33, 68	4025	NP	4075	NP
151	30, 31	4026	61, 106	4076	78, 258
152	38, 120	4027	56, 71	4077	78, 253
153	33, 72	4028	61, 103;] 57, 78]	4078	77, 233
154	34, 80	4029	60, 100	4079	77, 240
155	40, 140	4030	NP	4080	67, 157
156	40, 137	4031	60, 101	4081	66, 150
157	40, 141	4032	58, 87	4082	63, 122
		4033	82, 287	4083	63, 120
		4034	EB - NP	4084	68, 184
		4035	81, 282	4085	65, 138
		4036	82, 285	4086	51, 47
		4037	82, 290	4087	51, 49
		4038	NP	4088	74, 210
		4039	NP	4089	58, 91
		4040a	58, 86	4090	EB - NP
		4040b	58, 90	4091	55, 65
		4041	66, 149	4092	51, 94-5
		4042	L16-NP	4093	59, 93
		4043	82, 288	4094	EB - NP
		4044	79, 264	4095	ND
		4045	79, 263	4096	62, 115
		4046	82, 286	4097	73, 202
		4047	EB - NP	4098	ND
		4047	NP	4099	65, 140
		4049	75, 217	4100	66, 147
				4101	56, 74
				4102	EB - NP

CN	Fig., No.	CN	Fig., No.	CN	Fig., No.
4103	73, 203	4154	63, 121;]	4206	80, 268
4104	NP		46, 28]	4207	NP
4105	51, 48	4155	65, 143	4208	81, 284
4106	54, 62	4156	81, 283;]	4209	80, 266
4107	66, 154		56, 73]	4210	83, 299
4108	NP	4157	87, 28	4211	ND
4109	66, 153	4158	87, 22	4212	76, 227
4110	46, 19	4159	87, 26	4213	NP
4111	65, 146;]	4160	EB - NP	4214	51, 43
	62, 111	4161	EB - NP	4215	77, 230
4112	EB - NP	4162	87, 18	4216	72, 194
4113	73, 206	4163	82, 293	4217	52, 50
4114	71, 191	4164	78, 251	4218	68, 173
4115	72, 198	4165	80, 276	4219	66, 152
4116	EB - NP	4166	80, 275	4220	86, 6
4117	77, 229	4167	87, 17	4221	88, 33
4118	62, 114	4168	88, 30	4222	53, 58
4119	EB - NP	4169	NP	4223	76, 226
4120	60, 99	4170	86, 5	4224	66, 151
4121	ND	4171	86, 10	4225	NP
4122	72, 200	4172	NP	4226	NP
4123	bs - NP	4173	NP	4227	59, 97
4124	bs - NP	4174	87, 16	4228	86, 3
4125	77, 232	4175	EB - NP	4229	EB - NP
4126	bs - NP	4176	ND	4230	86, 9
4127	bs - NP	4177	86, 1	4231	bs - NP
4128	bs - NP	4178	81, 277	4232	78, 247
4129	EB - NP	4179	NP	4233	79, 257
4130	75, 218	4180	83, 298	4234	78, 250
4131	51, 45	4181	83, 297	4235	87, 20
4132	42, 8	4182	42, 2	4236	85, 26
4133	EB - NP	4183	68, 167	4237	82, 289]
4134	NP	4184	65, 142		80, 273]
4135	58, 85	4185	56, 75	4238	42, 6
4136	52, 54	4186	bs - NP	4239	49, 30
4137	77, 234	4187	65, 137	4240	82, 295
4138	EB - NP	4188	71, 187	4241	NP
4139	87, 29	4189	71, 190	4242	87, 21
4140	64, 126]	4190	71, 193	4243	77, 228
	63, 124]	4191	73, 207	4244	52, 51
4141	71, 186	4192	77, 236	4245	70, 182
4141a	82, 296	4193	77, 237	4246	56, 70
4142	71, 192	4194	74, 211	4247	58, 84
4143	70, 181	4195	NP	4248	74, 209
4144	75, 219	4196	65, 141	4249	83, 301
4145	EB - NP	4197	51, 44	4250	83, 300
4146	= 4120	4198	74, 212	4251	55, 67
4147	67, 185	4199	80, 269	4252	72, 201
4148	52, 55	4200	86, 13	4253	60, 98
4149	86, 14	4201	72, 196-7	4254	69, 178
4150	EB - NP	4202	77, 235	4255	61, 104
4151	77, 421	4203	59, 92	4256	56, 69
4152	77, 238	4204	81, 281	4257	88, 37
4153	NP	4205	78, 254	4258	82, 294

CN	Fig., No.	CN	Fig., No.	CN	Fig., No.
4259	ND	4312	56, 72	4366	NP
4260	87, 23	4313	86, 2	4367	NP
4261	82, 291	4314	81, 278	4368	NP
4262	78, 246	4315	44, 15	4369	86, 19
4263	75, 220	4316	42, 3	4370	88, 31
4264	55, 66	4317	41, 1	4371	87, 27
4256	48, 25	4318	45, 16	4372	84, 13
4266	68, 172	4319	62, 110	4373	84, 11
4267	NP	4320	70, 180	4374	85, 28
4268	50, 37	4321	80, 267	4375	85, 32
4269	80, 271	4322	61, 105	4376	85, 35
4270	88, 36	4323	86, 12	4377	84, 6/10
4271	= 4273	4324	85, 29	4378	53, 57
4272	72, 199	4325	44, 12	4379	84, 8/9
4273	67, 159	4326	70, 179	4380	87, 24
4274	ND	4327	63, 125	4381	84, 18
4275	72, 195	4328	65, 137	4382	85, 40
4276	56, 77	4329	86, 8	4383	84, 20
4277	NP	4330	88, 38	4384	84, 15
4278	71, 188	4331	78, 242	4385	85, 24
4279	NP	4332	84, 16	4386	85, 25
4280	78, 252	4333	76, 222	4387	85, 38
4281	87, 15	4334	81, 280	4388	84, 21
4284	82, 292	4335	ND	4389	ND
4283	55, 68	4336	87, 25	4390	85, 30
4284	61, 107	4337	NP	4391	84, 12
4285	60, 102	4338	EB - NP	4392	85, 31
4286	50, 35	4339	70, 260	4393	84, 5
4287	74, 214	4340	NP	4394	84, 14
4288	46, 26	4341	86, 11	4395	57, 79
4288a	62, 119	4342	64, 129	4396	84, 3
4289	51, 42	4343	50, 39	4397	84, 4
4290	58, 89	4344	69, 174	4398	84, 1
4291	61, 612	4345	52, 53	4399	84, 2
4292	42, 9	4346	49, 29	4400	84, 7
4293	NP	4347	EB - NP	4401	85, 34
4294	88, 35	4348	78, 244	4402	85, 33
4295	R15-NP	4349	80, 269	4403	85, 37
4296	NP	4350	50, 36	4404	85, 36
4297	86, 7	4351	71, 189	4405	84, 19
4298	46, 21	4352	81, 279	4406	76, 225
4299	66, 155	4353	bs - NP	4407	46, 22
4300	NP	4354	85, 23	4408	NP
4301	78, 256	4355	69, 176	4409	85, 39
4302	88, 39	4356	EB - NP	4410	NP
4303	69, 177	4357	53, 56	4411	ND
4304	88, 34	4358	62, 117	4412	43, 10
4305	74, 213	4359	115, 4	4413	47, 23
4306	68, 171	4360	88, 32	4414	NP
4307	62, 108	4361	76, 221	4415	67, 161
4308	55, 64	4362	78, 245	4416	46, 18
4309	70, 183	4363	115, 2	4417	64, 134
4310	85, 22	4364	84, 17	4418	67, 160
4311	70, 184	4365	79, 265	4419	NP

CN

Fig., No.

4420	77, 239
4421	73, 205
4422	70, 185
4423	66, 148
4424	62, 116
4425	77, 231
4426	65, 144
4427	73, 204
4428	50, 32
4429	62, 109
4430	42, 4
4430a	74, 208
4431	65, 135
4432	57, 81
4433	54, 60
4434	76m 223
4435	EB - NP
4436	44, 11
4437	62, 113
4438	67, 156
4439	57, 80
4440	65, 145
4441	58, 88
4442	62, 118
4443	NP
4444	69, 175
4445	52, 52
4446	53, 59
4447 -]	
4470]	L16-NP
4471	78, 243
4472	42, 5



1. R12. Gateway of late medieval fort. View E. Scale: 2 m.



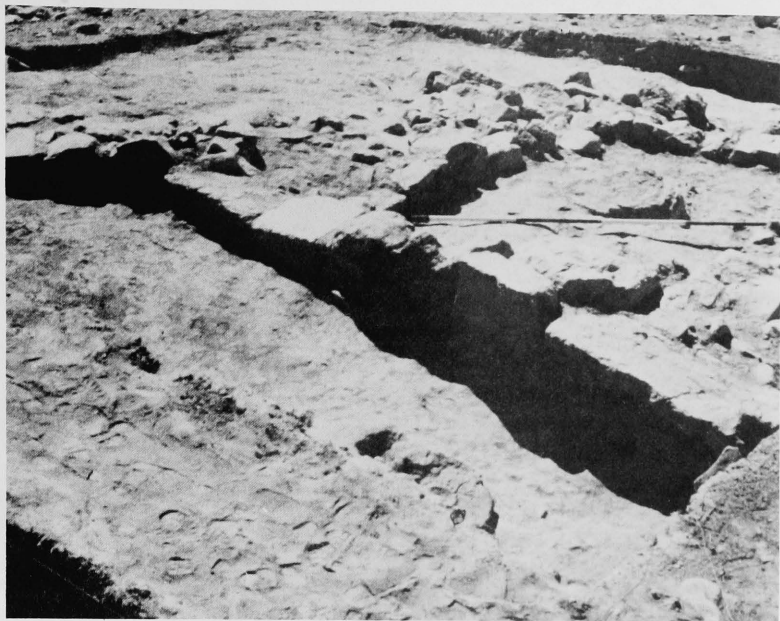
2. R11. Walls of room 36. View W. Scale: 2 m.



3. S11. Walls of room 2. View SW. Scale: 1 m.



4. S12. Clay objects in room 2. View N.



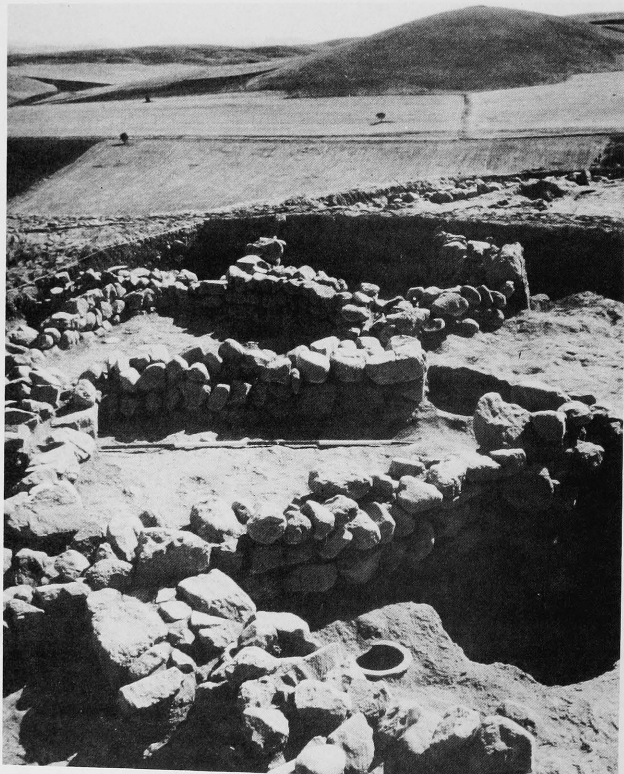
5. S12. Rooms 2 (foreground) and 3, with blocked doorway.



6. S11. Rooms 5, 6 and 7. View NE. Scale: 2 m.



7. S10. Room 12. Tandir/and vent. View E. Scale in decimetres.



8. R9. Rooms 29, 27, 24 and 22. View NE.



9. R10. Wall on S side of room 30. View S. Scale: 1.50 m.



Tower room 31. View E. Scale: 1 m.



11. R10. Sunken area in room 32 with CN 4318 (fig. 48, 16).



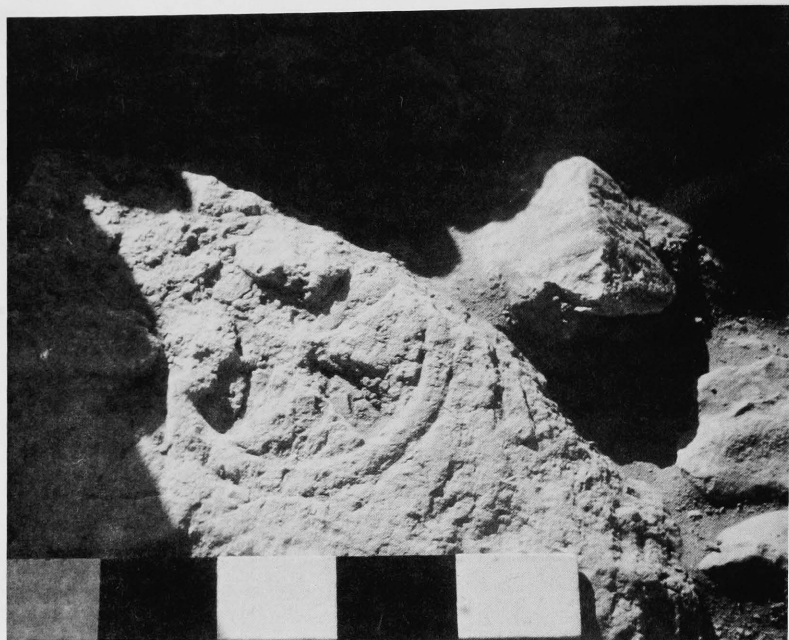
12. R10. Rooms 32 (foreground) and 30. View N



13. R11. Room 36. View SW. Scale: 2 m.



14. R11. Room 36. View NE.



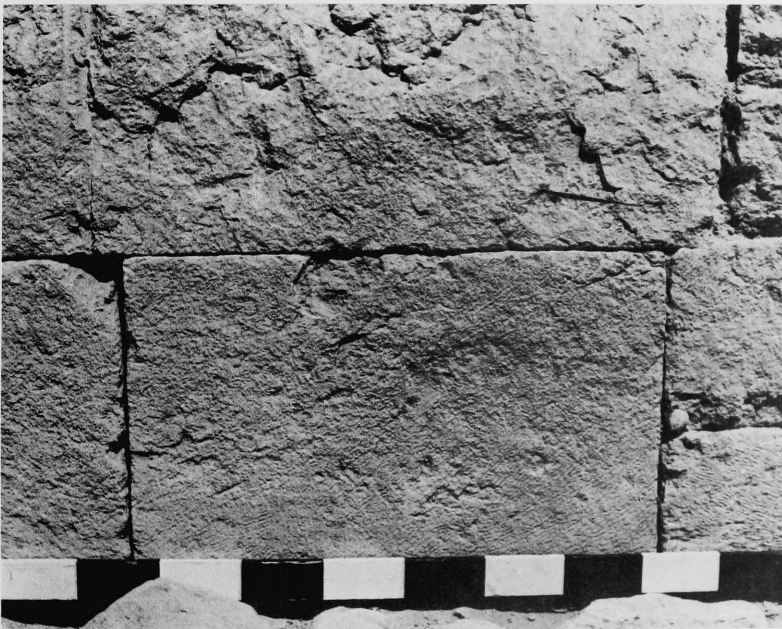
15. R11/12. Baulk. Carved stone re-used in fortress gateway.



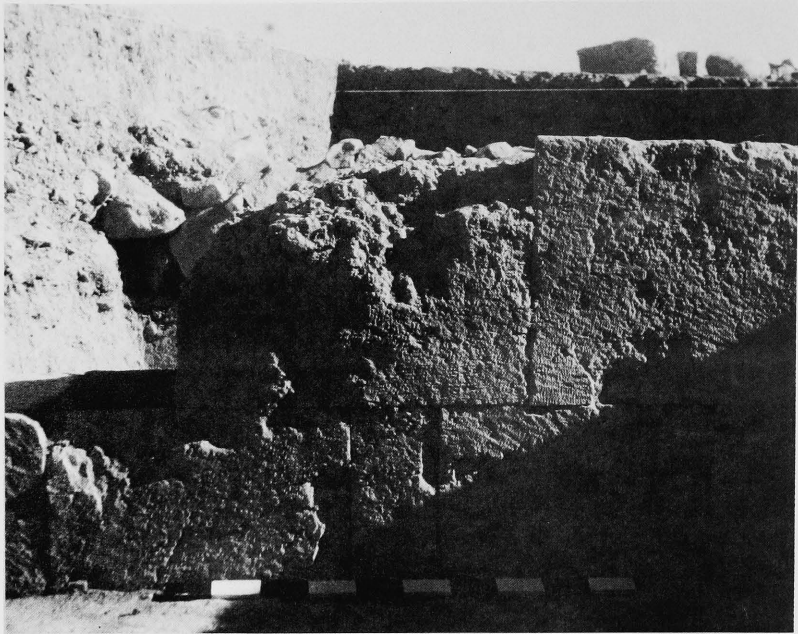
16. Q9E. Curtain wall with earlier wall diagonal



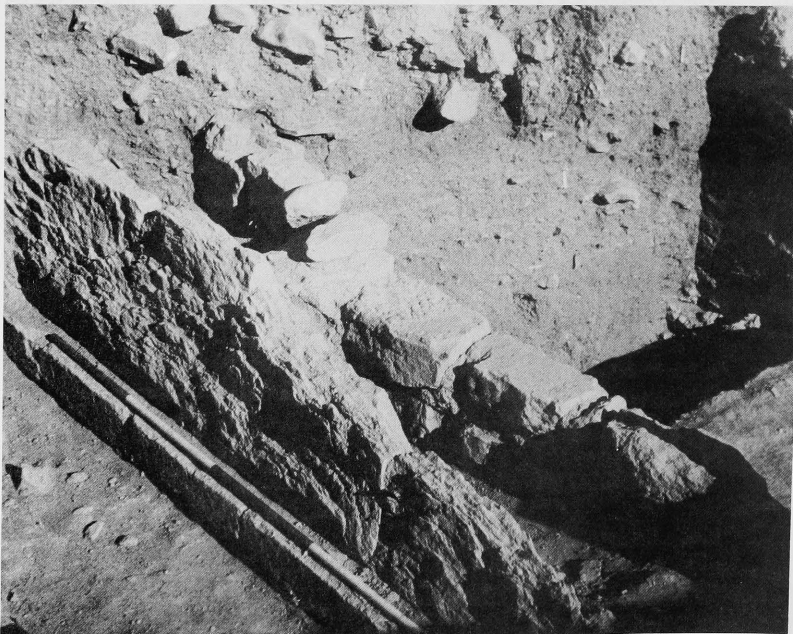
17. R10. Christian burial. View N. Scale: 0.50 m.



18. H21. Ashlar blocks of wall 5. View N. Scale in decimetres.



19. H21W. Ashlar blocks in wall 5. View S. Scale: 1 m.



20. H21. Wall 5. View SE. Scale:



21. K21. S pier and CP 1 wall (1.). View S. Scale in decimetres





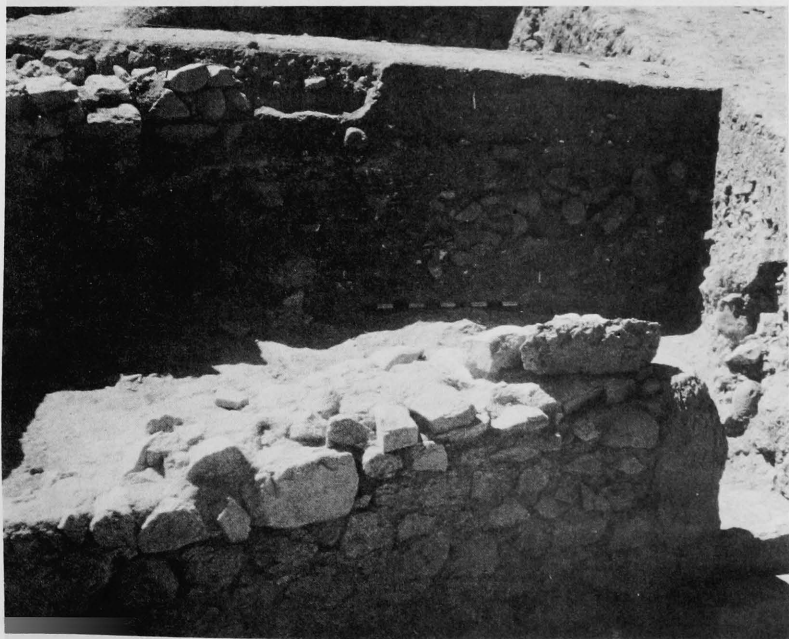
23. K21. Pit containing horse's skull and two hooves.



24. K21. Inner face of apse (CP 1 and 2



25. K21. Outer face of wall 1 (CP 1 and 2). View W. Scale: 2 m



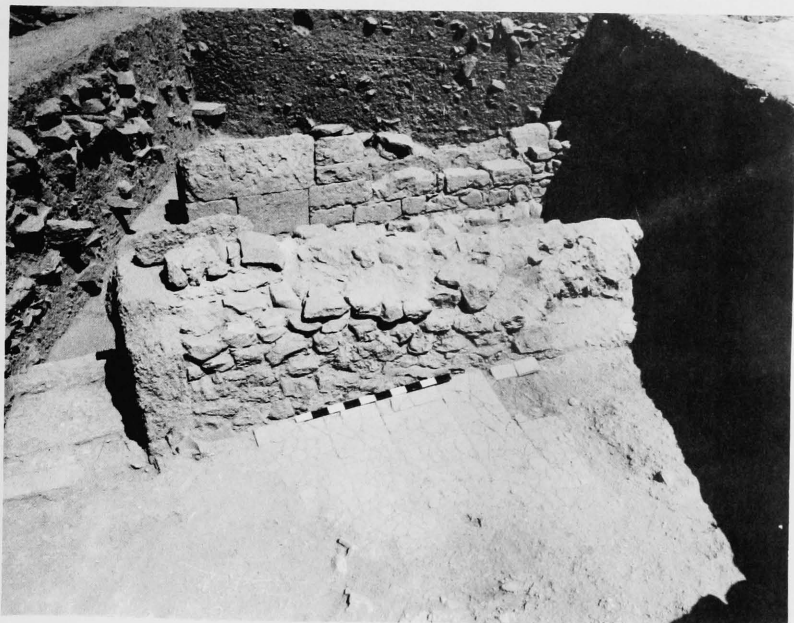
26. H21. Wall 4 (CP 1). View S. Scale: 1 m.



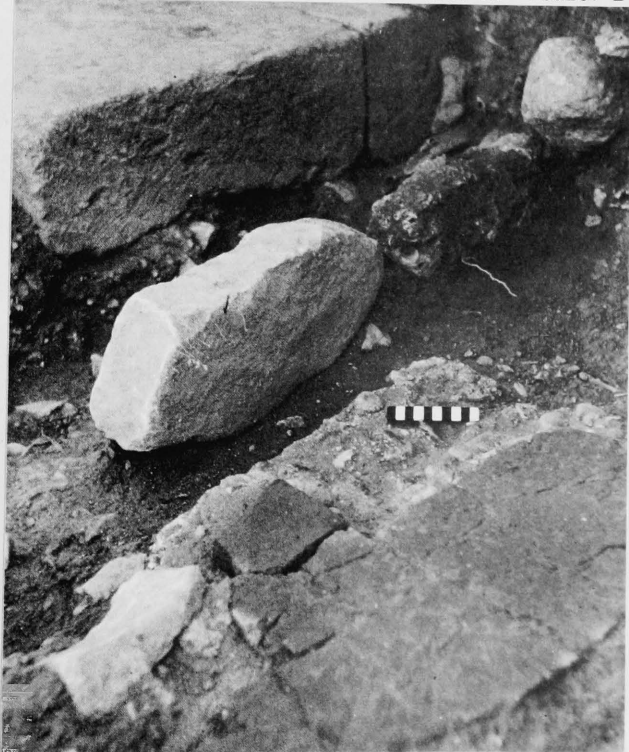
27. J22. Wall 10/11 (CP 1). View ENE.
Scale: 2 m.



28. K21. Wall 1, inner face (CP 1 & 2). View NNE.
Scale: 2 m.



29. H21. Wall 4 (CP 1) and tiles. View N. Scale: 1 m.



Robbed wall 14 and tiles (CP 1). View NE. Scale: 0.10 m.



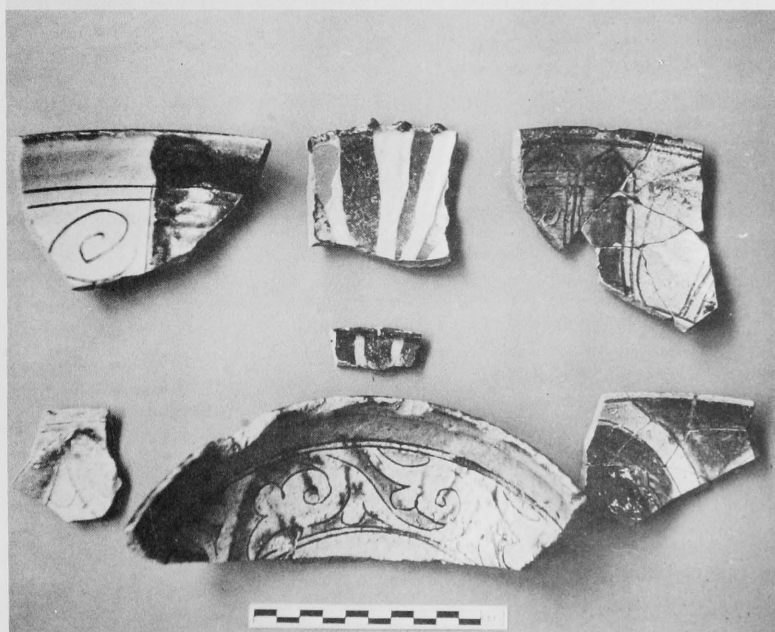
31. J21, J22 & K21. General view of CP 2 church. View NNE.
Scale: 2 m.



32. J21. Chapel with carved stones in situ. View ENE. Scale: 2 m.



33. Glazed sherds CN 124, CN 108 and CN 122.



34. Glazed sherds CN 126, CN 127, CN 59
CN 53
CN 5, CN 99, CN 16.



35. Glazed sherds CN 80, CN 103, CN 3, CN 150
 CN 118, CN 2, CN 142, CN 1, CN 77
 CN 110, CN 115, CN 102, CN 137, CN 147.



36. Glazed sherds CN 106, CN 83, CN
 CN 133, CN 130, CN 104
 CN 132, CN 8.



37. Glazed sherds CN 140, CN 149, CN 148
CN 84, CN 93.



38. Glazed sherds CN 152, CN 40, CN 113,
CN 157,
CN 156, CN 144, CN 143.



1



2

39. Carved stones from chapel.

3



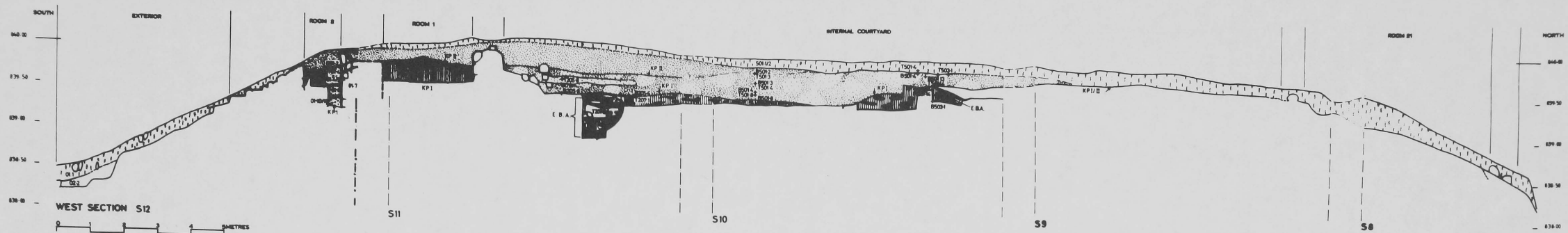
4



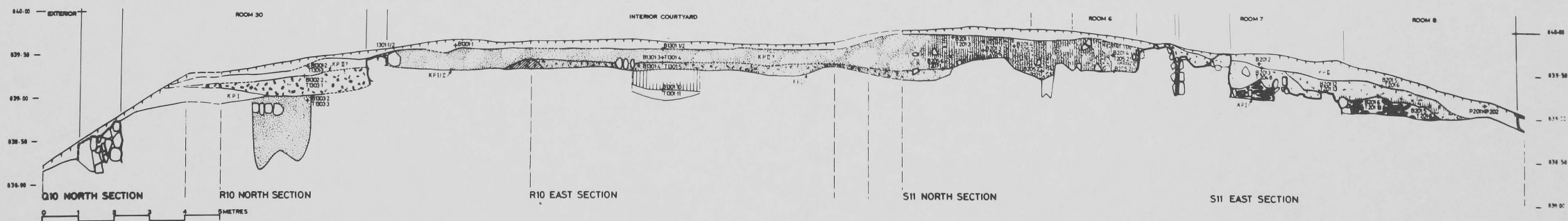
5



. Carved stones from chapel.

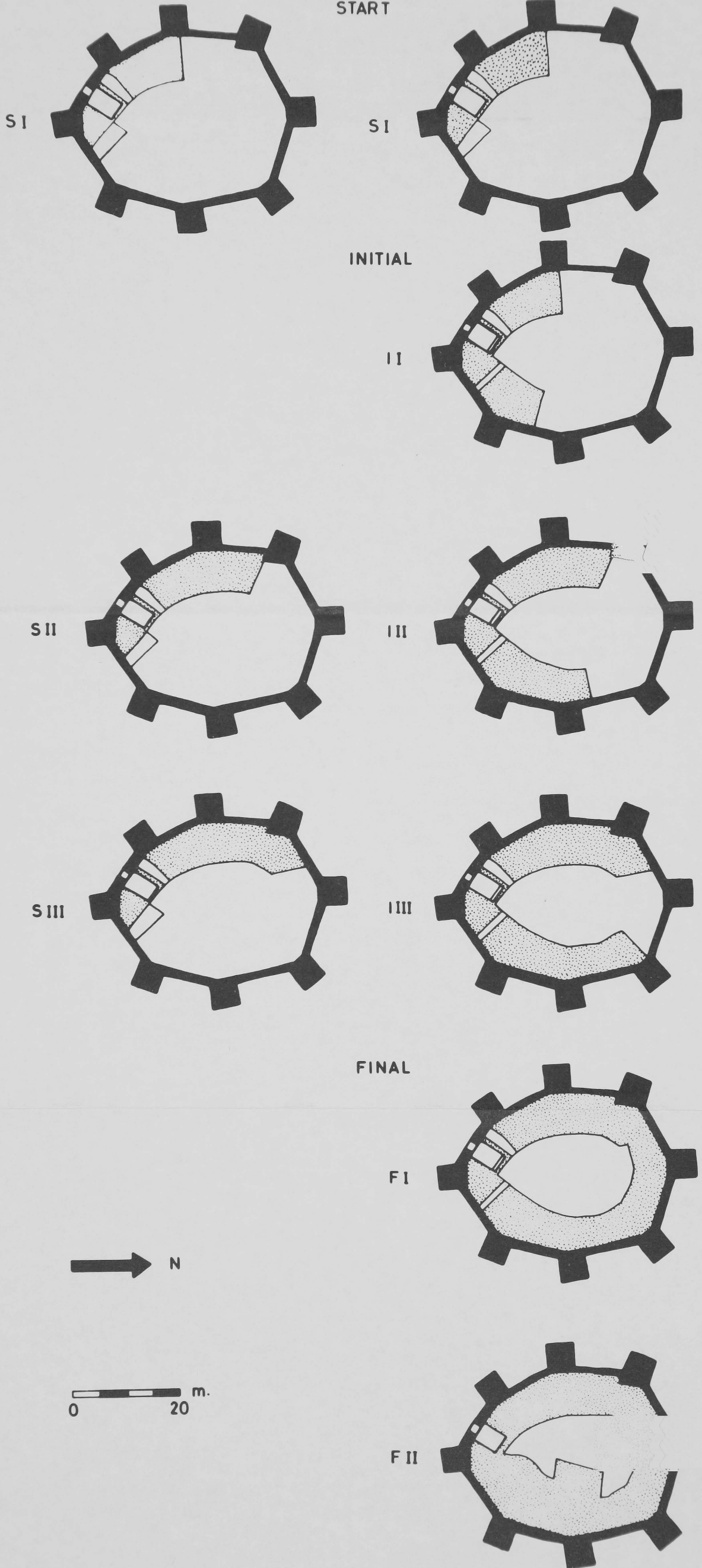


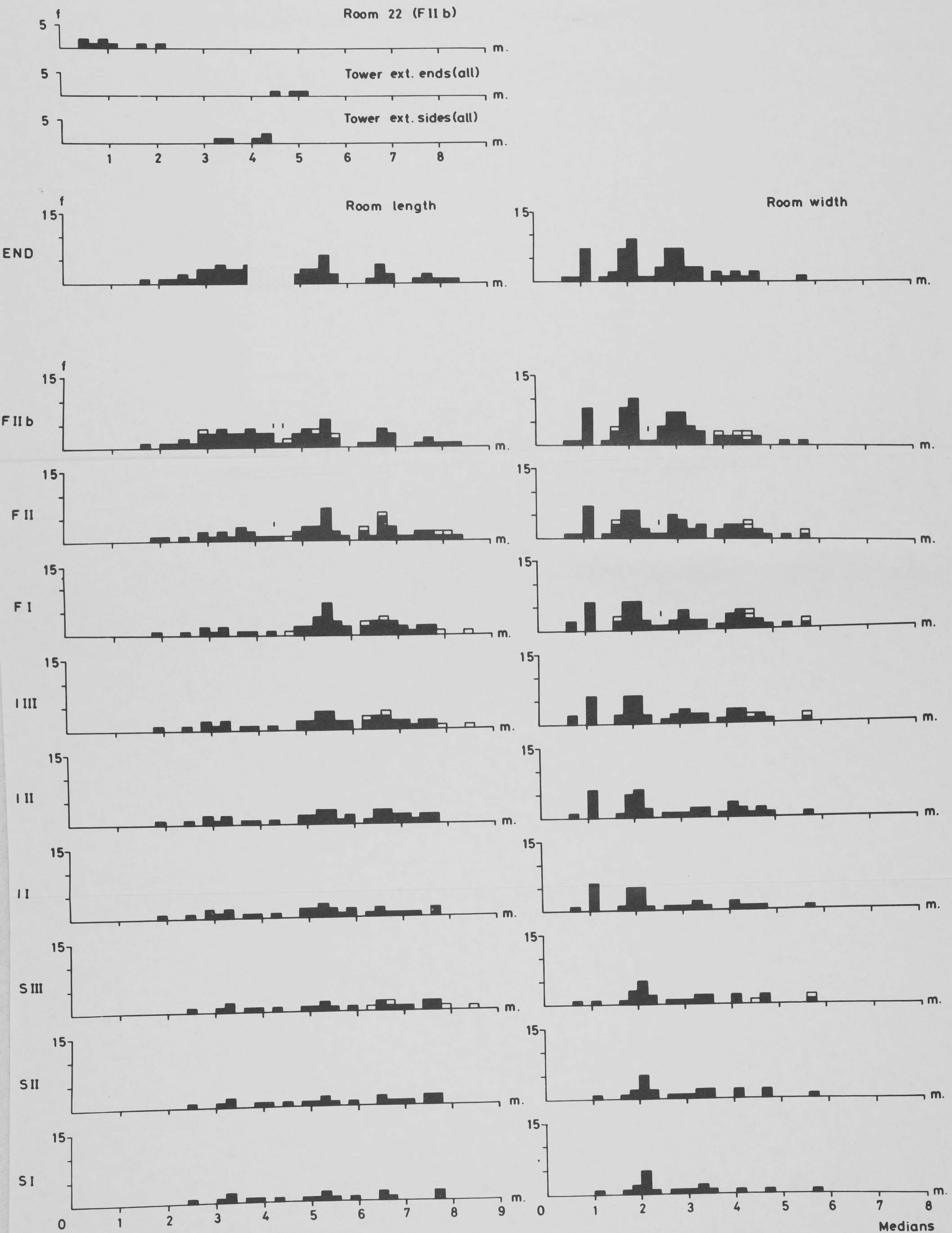
2a. Kale transect S12/S11/S10/S9/S8



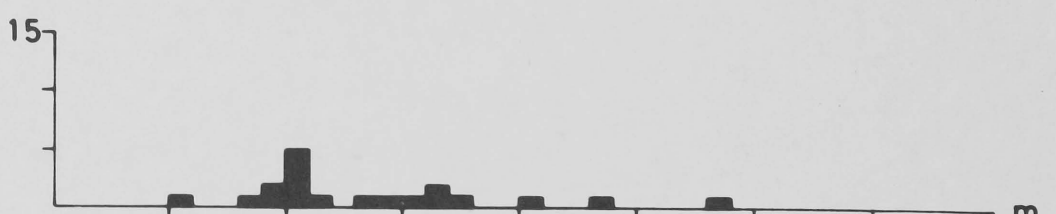
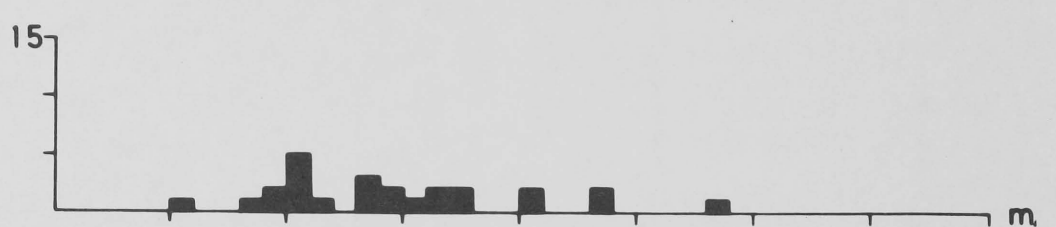
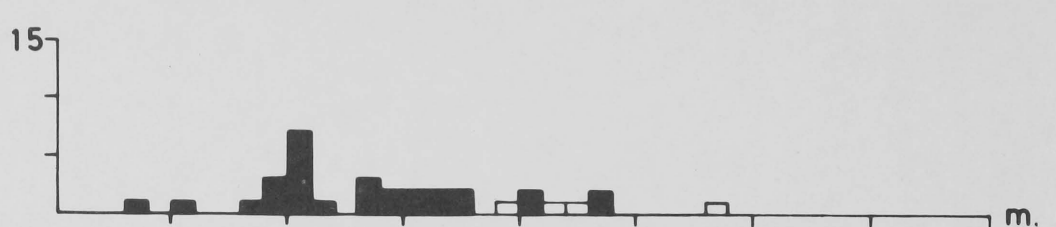
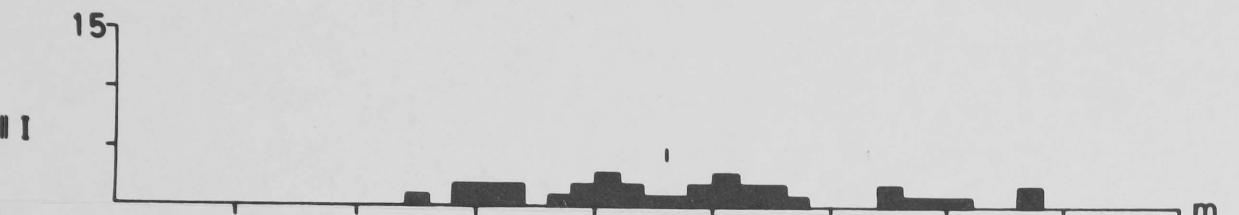
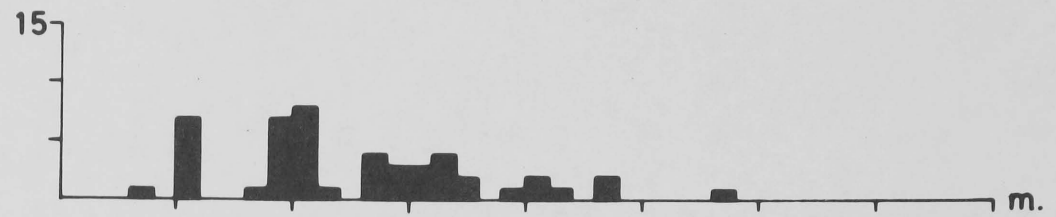
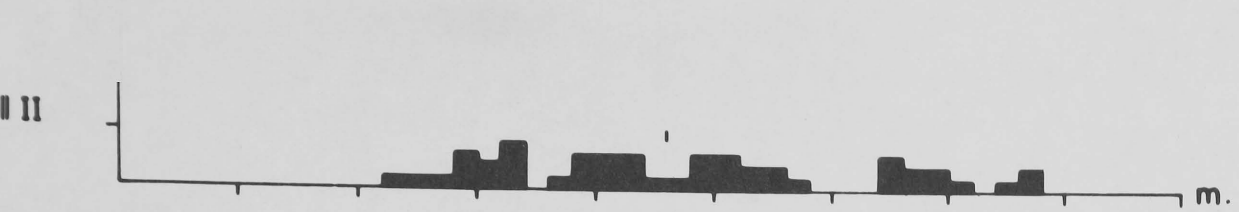
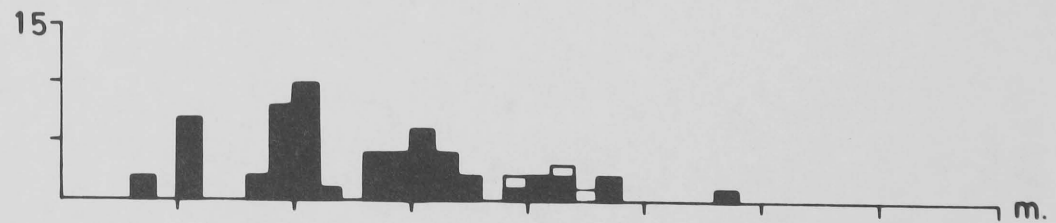
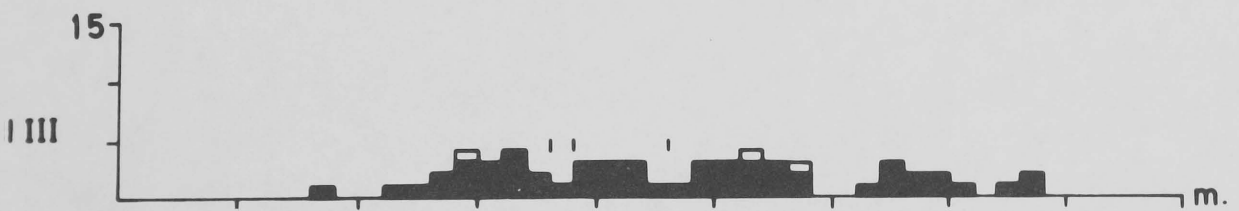
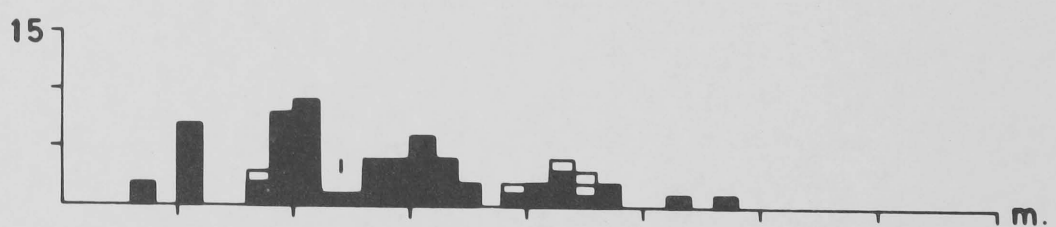
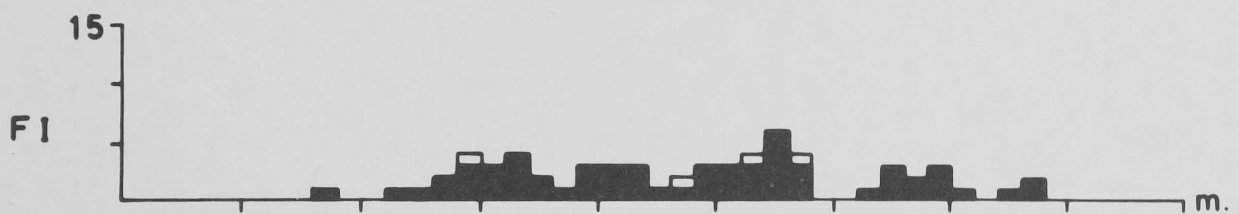
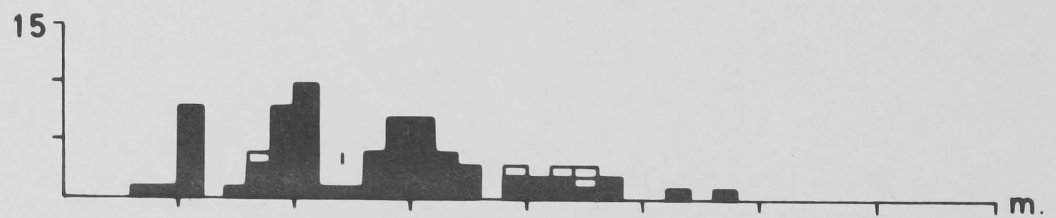
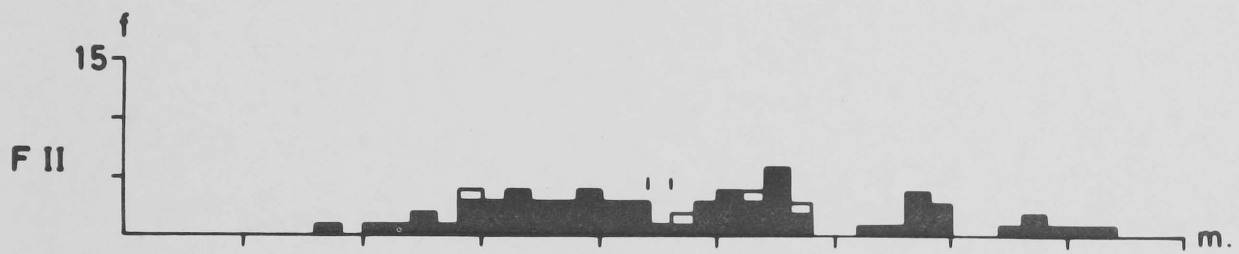
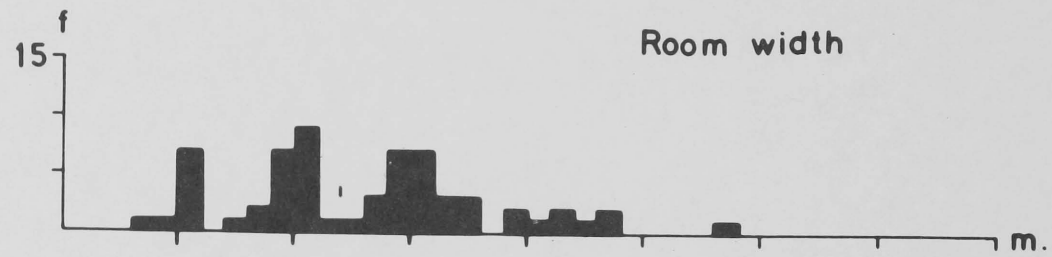
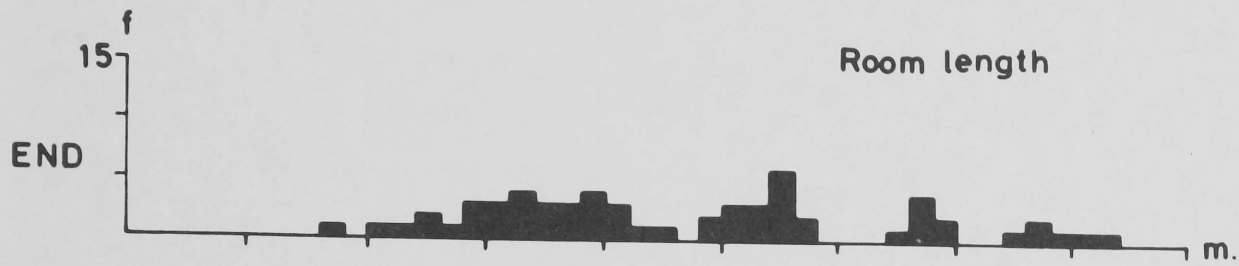
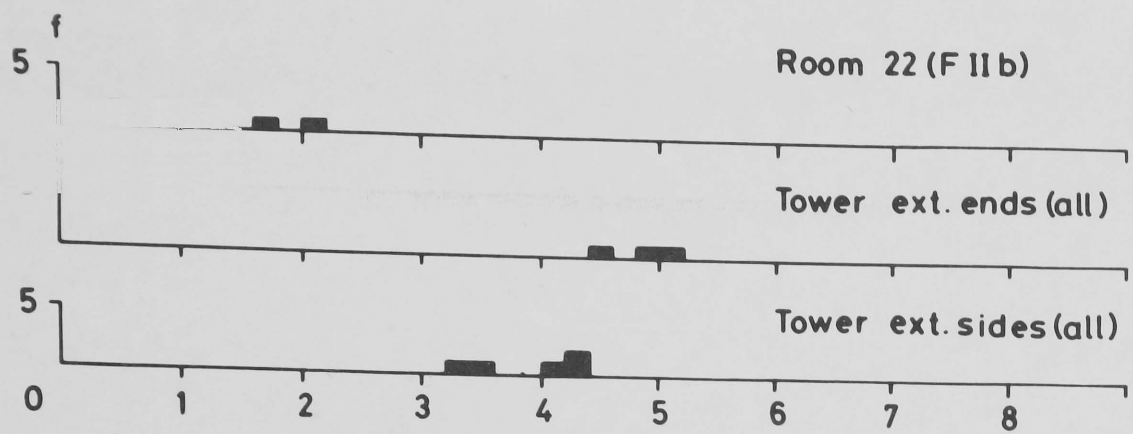
2b. Kale transect Q10/R10/S11

3. Taşkun Kale. Sequence of additions and alterations





4a. Taşkun Kale. Sequence of distributions of room widths and lengths (a) condition.



■ Distribution divide

□ 3rd stage reconstruction values

4b. Taskun Kale. Sequence of distributions of room widths and lengths (b) condition.

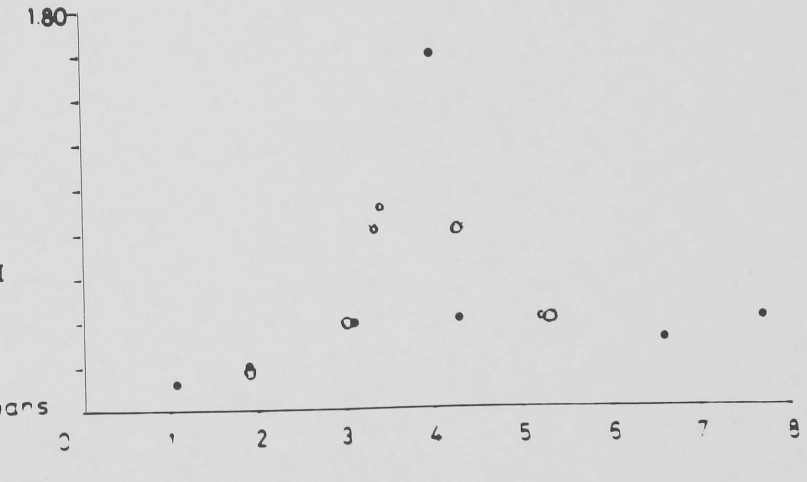
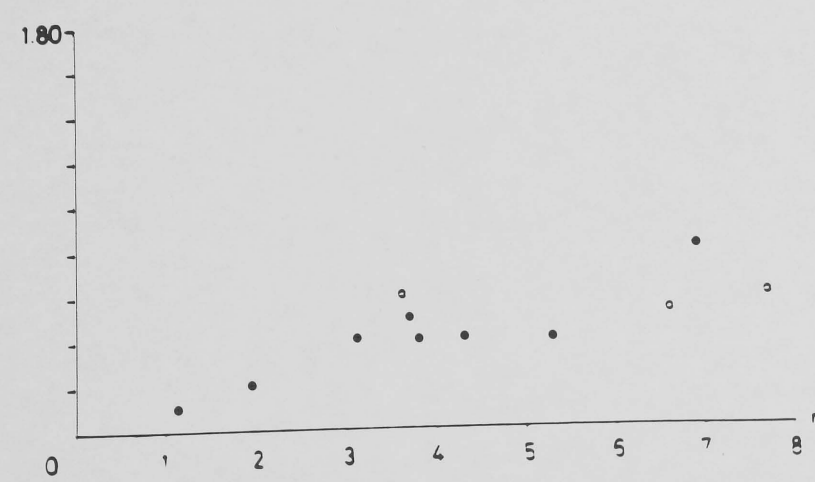
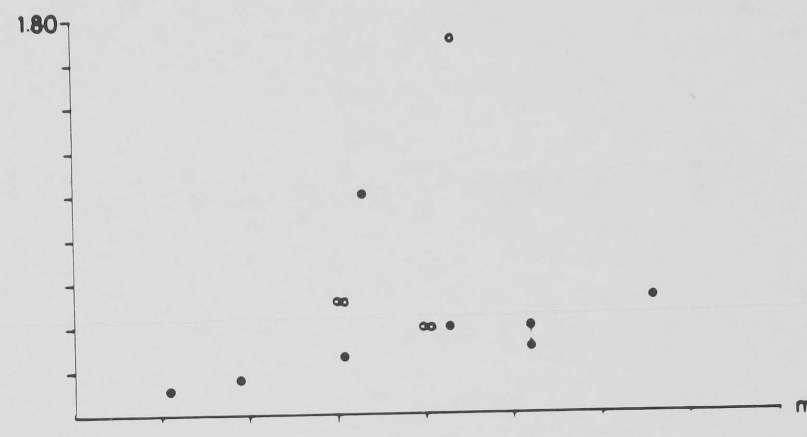
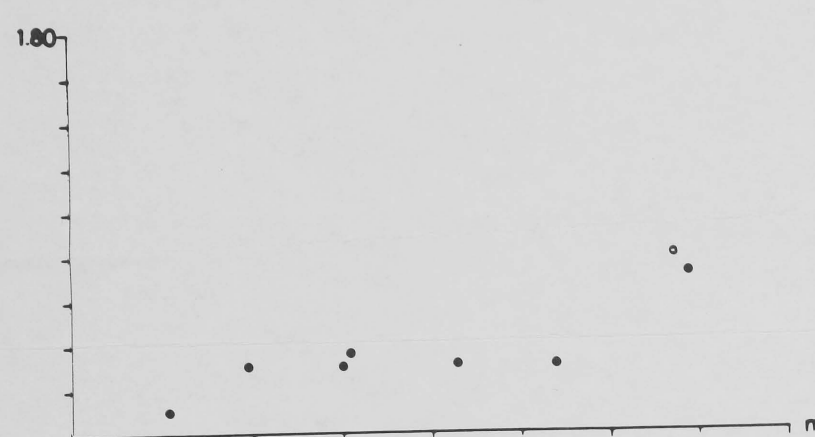
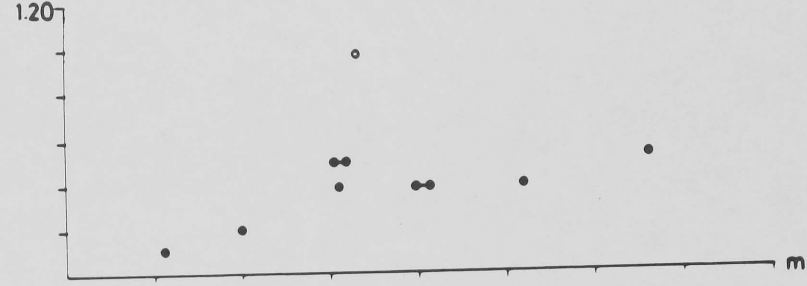
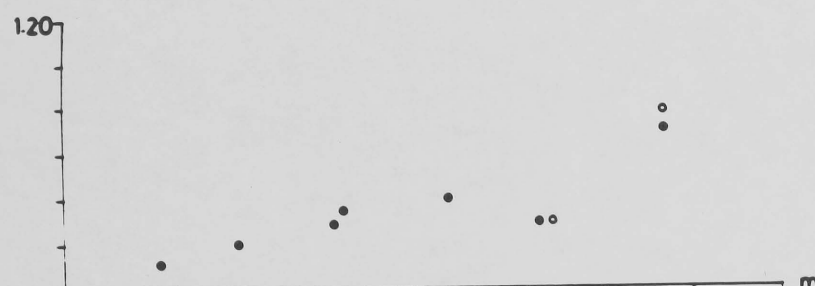
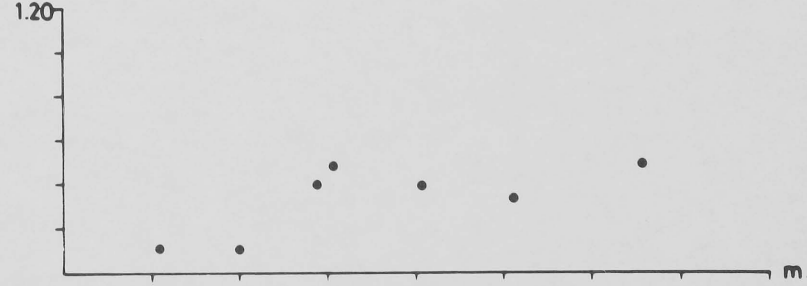
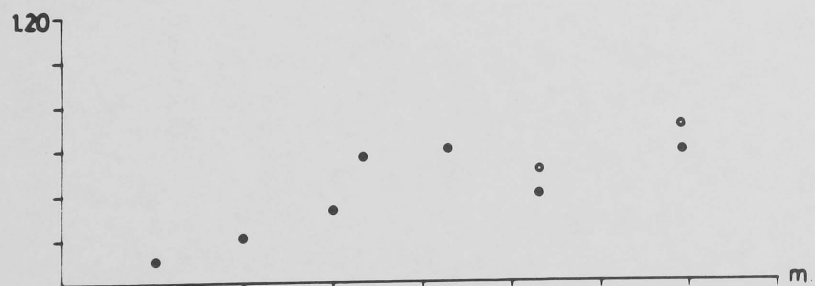
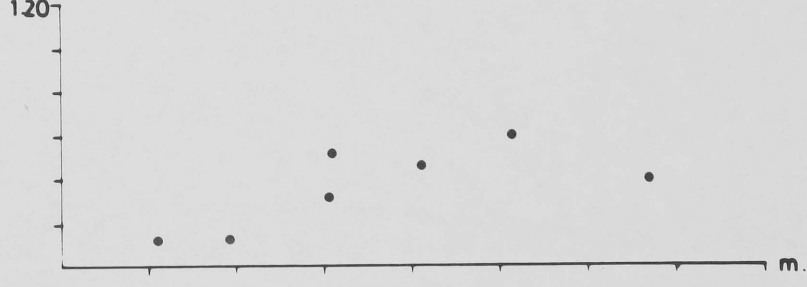
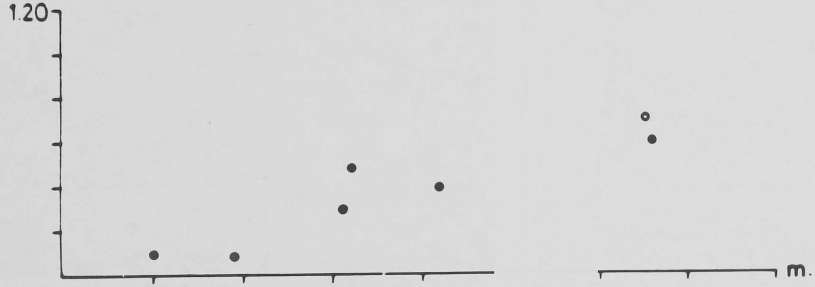
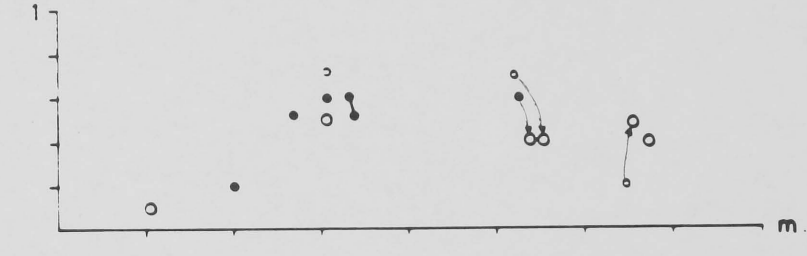
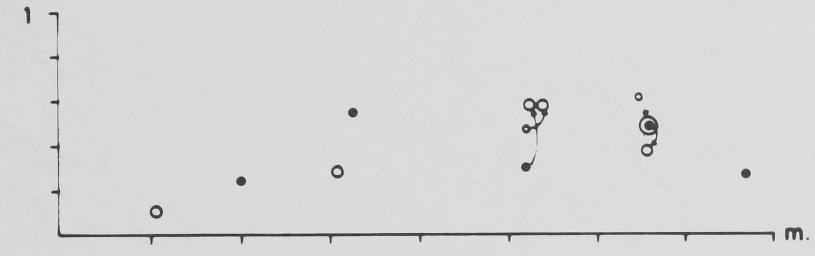
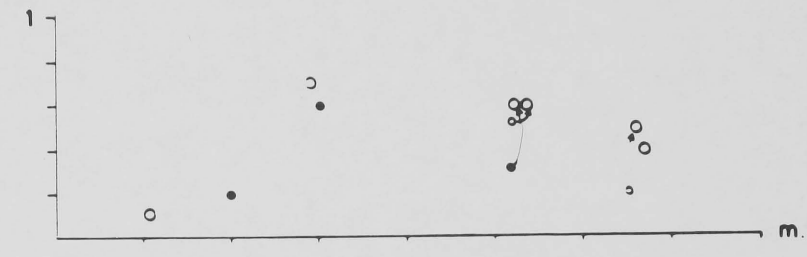
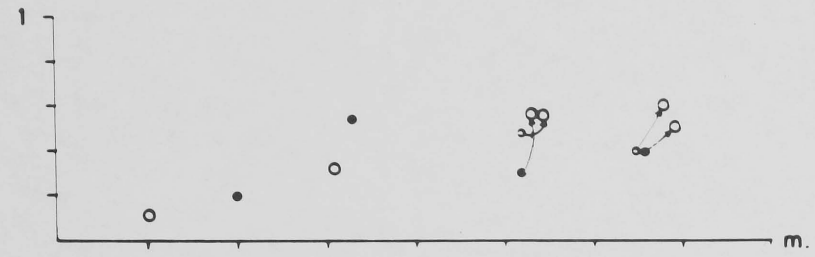
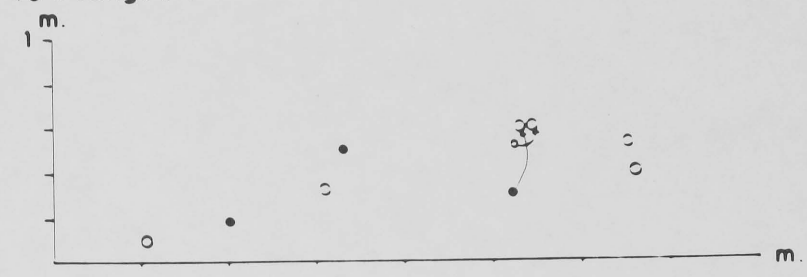
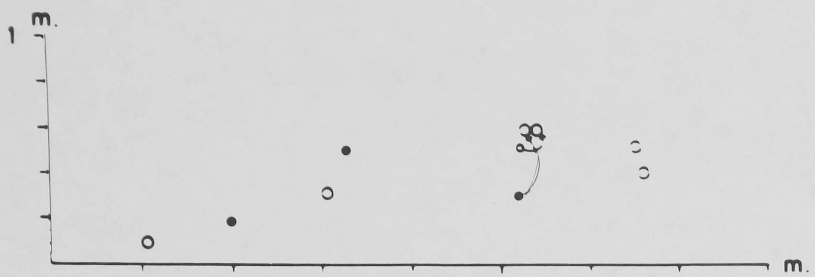
Medians

(a) condition

(b) condition

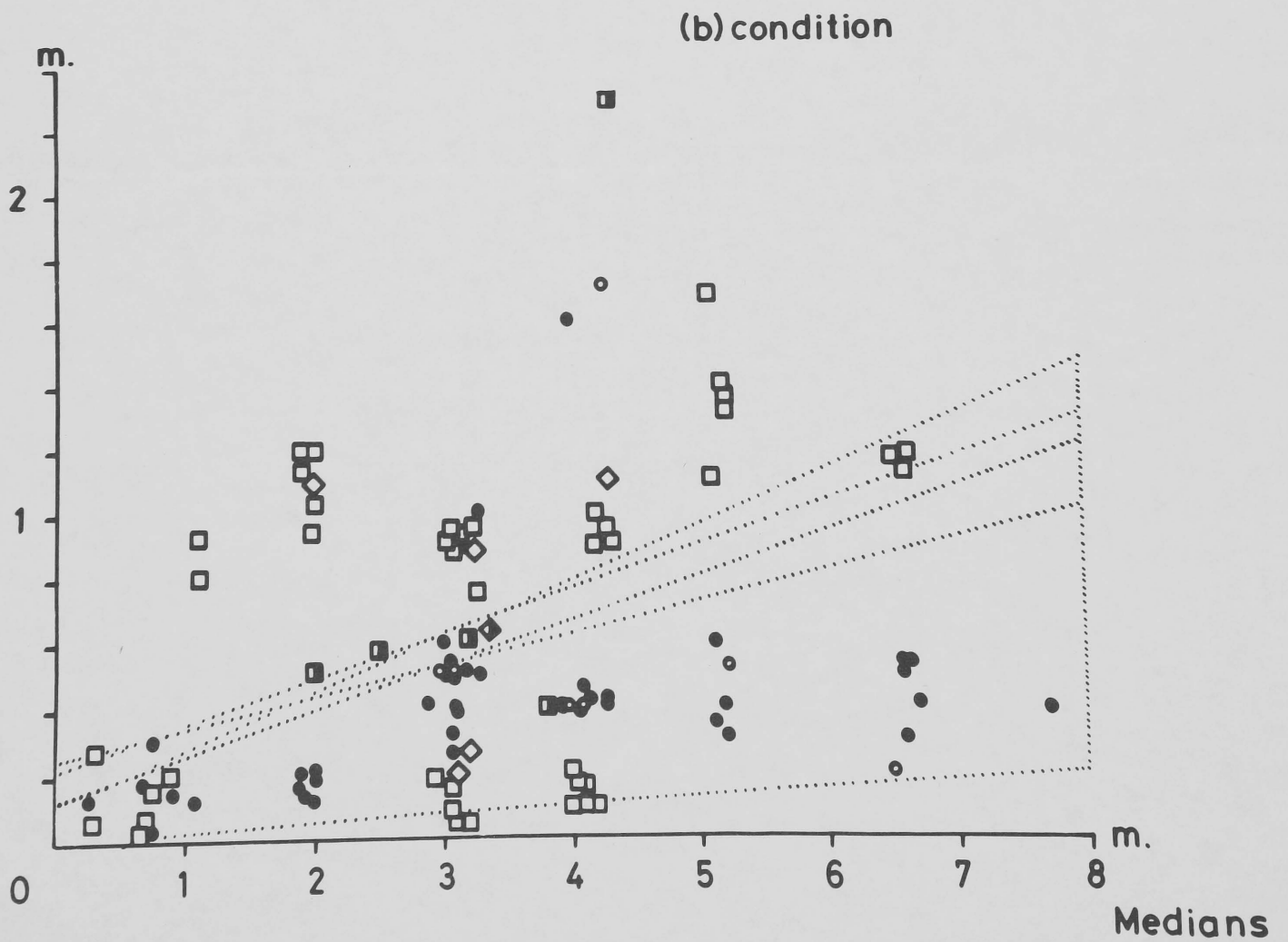
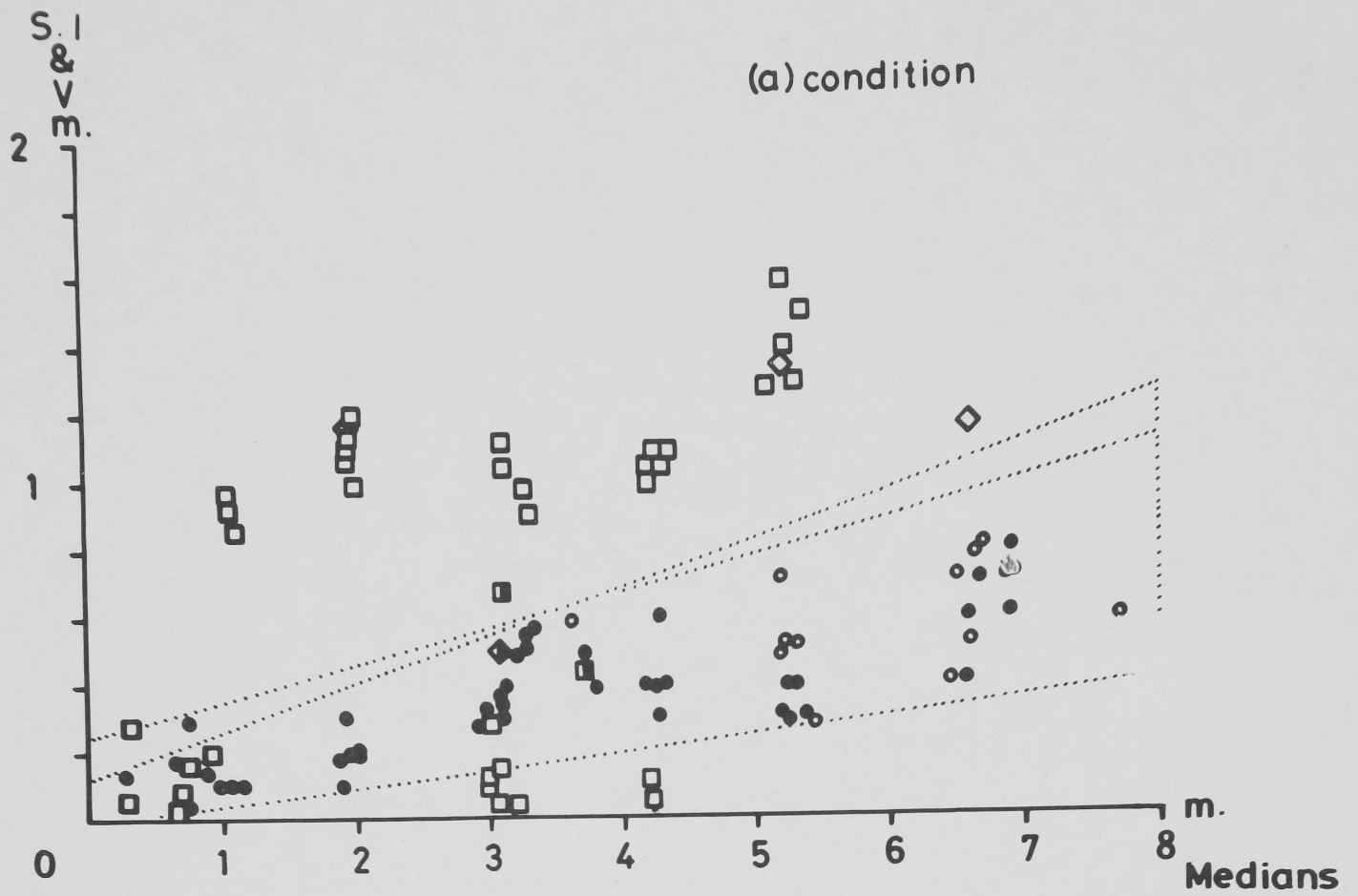
40% range (V)

40% range (V)



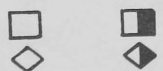
- Primary values
- Secondary or alternative values
- Values when rooms 4 and 5 are added to Start States
- End values with Final II(b) values

5. Taşkun Kale. Sequence of 40% range values.



Median separation values

Primary
Secondary



Variation values

Primary
Secondary



