This report gives a brief summary of the results of excavation at Can Hasan in the autumn of 1963 and the autumn of 1964. In 1963 work began on September Ilth and continued until September 28th. The staff included Messrs N. H. S. Kindersley, and D. J. Blackman, field assistants, Mrs D. J. Blackman, Messrs J. E. Reade and M. C. C. Davie, pottery assistants. Bay Behcet Erdal of the Istanbul Archaeological Museum represented the Turkish Government. In 1964 excavation began on September 6th and finished on October 10th. A further week was spent on the detailed work of planning, photagraphy and pottery study. The staff in 1964, in addition to my wife and myself, included Messrs N. H. S. Kindersley, J. E. Reade, R. W. Dutton, S. Payne, field assistants, I. J. Walls, architect, D. C. Biernoff, bone specialist, Mrs D. C. Biernoff, Misses M. A. White, P. M. Pratt, T. Martin, and V. Pemberton-Piggott, conservators, and Miss R. J. Worth, pottery assistant. Bay Havrettin Solmaz of the Konya Museum represented the Turkish Government.

It had been the aim in 1963 to excavate more houses of the transitional Early to Middle Chalcolithic period (Layer 2 B) but throughout the area chosen (Squares R 24 c-d, S 24 c-d, R 25 a-b, S 25 a-b) remains of Late Chalcolithic occupation were found just below the surface. Work was therefore concentrated on clearing the architectural remains of this period and one of the aims of the 1964 season was to continue this study of the Late Chalcolithic period (Layer 1). Another aim in 1964 was further excavation of the Middle Chalcolithic deposit (Layer 2 A), known from the 1962 season to

exist at the north west corner of the excavation area. The results of the two seasons are here summarized together by period.

### LAYER 1

This layer is basically Late Chalcolithic although, in addition, it includes everything from Iron Age to Roman material.

### IRON AGE

Numerous pits of Iron Age date had been cut into the Late Chalcolithic levels on the south side of the excavation area. There are as yet no building levels of this period but two finds are worthy of note. In 1963 (in Square S 24 d, pit 1) was found a fairly well preserved jug painted in the Black on Red technique which in Cilicia and South-West Anatolia is called 'Iron Age'. In 1964 (in Square S 25 d, pits 2 and 3) was found part of a jar in Phiygian grey ware.

# LATE CHALCOLITHIC

Until 1963 only isolated patches of Late Chalcolithic occupation had been found, but in 1963 extensive remains were discovered on the south side of the excavation. This was extended in 1964.

### ARCHITECTURE (Fig. 1)

Houses of the Late Chalcolithic period are totally different from those of the Early Chalcolithic period. (No houses have as yet been cleared which were built in the Middle Chalcolithic period.) The orientation, the lay-out, the thickness of the walls, the size of the bricks are all

different. There are no wall paintings but good white clay plaster is frequently used. In the Late Chalcolithic settlement in contrast with the Early Chalcolithic a certain amount of space was given over to courtyards. In these courtyards were built ovens and small enclosures or bins with thin narrow walls. As nothing was found in these bins we do not know their purpose. There was continuous development in the settlement: the various structures were continually altered; new walls were built and old one replaced. Another relatively complete house (the continuation of one discovered in 1962) with well preserved white clay plaster on floors and walls was cleared in 1964 on the west side of the excavation area.

# POTTERY (Fig. 2: 1-3)

Very little pottery was found in 1963 but the 1964 season produced much more material. The basic ware is plain burnished, and is red, red-brown or black in colour. Scored and unburnished wares also occur. The repertoire of shapes includes carinated jars, either hole-mouth or with a short straight neck (Fig. 2: 3; CAN/64 500) and a variety of open shapes: carinated hole-mouth bowls (Fig. 2: 2; CAN/64/693), simple hemispherical bowls, straight-sided bowls (Fig. 2: 1; CAN/64 /570), and platters or cooking dishes. Lids of two types are known. The jars are frequently roughly decorated with matt white paint. Fine white paint, dark painted patterns on a light ground, and incision are also occasionally found.

#### SMALL OBJECTS

Stone-In 1963 few stone implements were found but in 1964 a quantity of querns, mortars, pounders and polishers was recovered. In this period stone, usually a fine limestone or marble, was also used for figurines and bowlst but the former were discovered this year only as chance finds on the surface of the mound. Obsidian - This was comparatively rare

in both seasons but many small obsidian flakes were recovered from one house (in Square S 26 a) of which the whole fill was sieved.

Clay - Horned andirons with one or two handles were found in both years. Some were painted red. A profusion of small clay artifacts including miniature 'tops', disks, sling bullets, and figurines (animal and human, both male and female) came from the house in Square S 26 a.

Bone - Bone implements were rare but in 1963 a spatula was found in fill above a floor in Baulk S 24c/25a and in 1964 a spoon, several points and a sleeve for an axe came from similar fill elsewhere in the southern section.

Grain - Some grain and seeds suitable for analysis were recovered in 1964 from sieving the fill of the house in Square S 26 a.

Bones - There was little bone material from the 1963 season but in 1964 a considerable quantity of identifiable animal bones was recoveerd from well stratified contexts. These included sheep, goat and cattle (all presumably domesticated), pig, equid, deer, torto ise, cat and rodent.

#### LEYER 2 A

Middle Chalcolithic occupation occurs directly underneath the Late Chalcolithic in the southern section but these layers were scarcely touched either in 1963 or 1964. In 1964, however, the Middle Chalcolithic deposit at the north west corner of the excavation area, the existence of which was known from the 1962 season, was one of the chief aims of the excavation. It proved, as in 1962, to consist of a succession of minute soil strata and ash lines.

#### **ARCHITECTURE**

As yet no structures of the Middle Chalcolithic period have been cleared though walls either built or at least used in this period are known.

# **POTTERY** (Fig. 2: 4-7)

The characteristic pottery of this period is a painted ware. This pottery is assential a Drak on Light style (Fig. 2: 6; CAN/64/671) but together with it there is a rarer Polychrome style (Fig. 2: 4, 5, 7; CAN/64/563, 667, 676). At the same time burnished wares, usually grey or buff, continued to be used. The shapes of the painted pottery are large and small jars and varios types of bowl. The shapes of the grey burnished pottery are almost always small bowls on which incision is sometimes used. The shapes of the buff burnished ware are similar to those of the painted ware.

#### SMALL OBJECTS

Stone - A good selection of querns, mortars, pounders and polishers was recovered from Square Q 21 c. There were also fragments of two stone axes and a marble bracelet.

Obsidian - Only broken blades and flakes were found.

Clay - Fragments of anthropomorphic andirons, animal figurines, disks, sling bullets and a spoon were found.

Bone - An number of bone implements were recovered. Awls and horn sleeves (for axes) were the most common.

Bones - In Square Q 21 c one ash line produced a large deposit of sherds and animal bones. These included sheep, goat, cattle and equid. In another stratum of the same square was found the skull of a cow of a clearly domesticated species. This is one of the earliest domesticated species of cow as yet identified.

## **SUMMARY**

The settlement pattern of the Late Chalcolithic village is now much clearer. There is a distinct contrast with the settlement pattern of the Early Chalcolithic village. In the Late Chalcolithic village the houses are much more loosely grouped and are given courtyards and

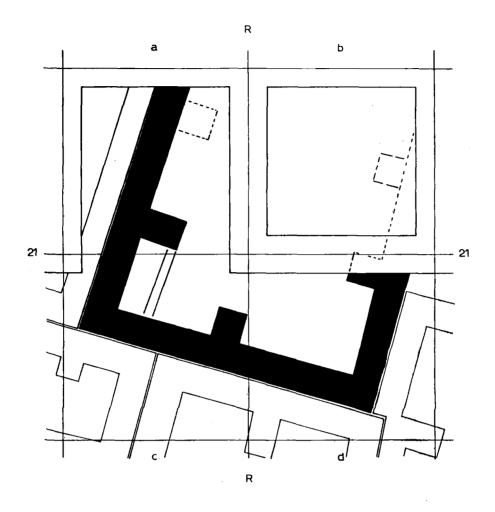
open spaces around them. There is no evidence for two storey houses. The layout is much less regular then in the Early Chalcolithic village; corners are rarely right-angled. The looser grouping of the Late Chalcolithic houses enabled alterations and additions to be made easily; whereas the Early Chalcolithic settlement, being densely packed, allowed no space around the houses for alterations and additions. There was only internal access to the walls of the Early Chalcolithic houses.

Although no metal has been found, there is evidence of the basic activities of a village settlement such as animal husbandry and agriculture. Our knowledge of the activities of the settlement was increased by the results of the attempt which was made to recover the total evidence from the house in Square S 26 a, the whole fill of which was sieved.

There are as yet no buildings of the Middle Chalcolithic Period and our knowledge of this period is based on the evidence coming from layers of rubbish. However, these layers of domestic refuse have given us a quantity of well preserved bones as well as a variety of artifacts. From the bones we are able to tell a great deal about the animals which were either kept domestically or hunted by the Middle Chalcolithic people. though we know nothing of the architecture, we know a considerable amount about the life of this Middle Chalcolithic settlement, its tools, its animals, and its food.

On the basis of C 14 dating the following absolute dates are possible for the various periods at Can Hasan:

Early Chalcolithic: 5,500 to 5,000 B. C. Middle Chalcolithic: 5,000 to 4,250 B. C. For the Late Chalcolithic period there are no C 14 dates but the approximate dates may be given as 3,750 to 3,250 B. C. For the present it is still assumed that there is a gap in the stratigraphic evidence at Can Hasan.



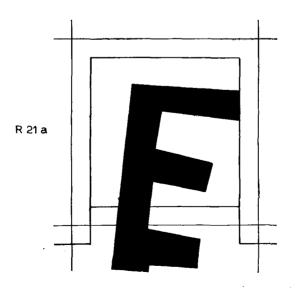


Fig. : 1

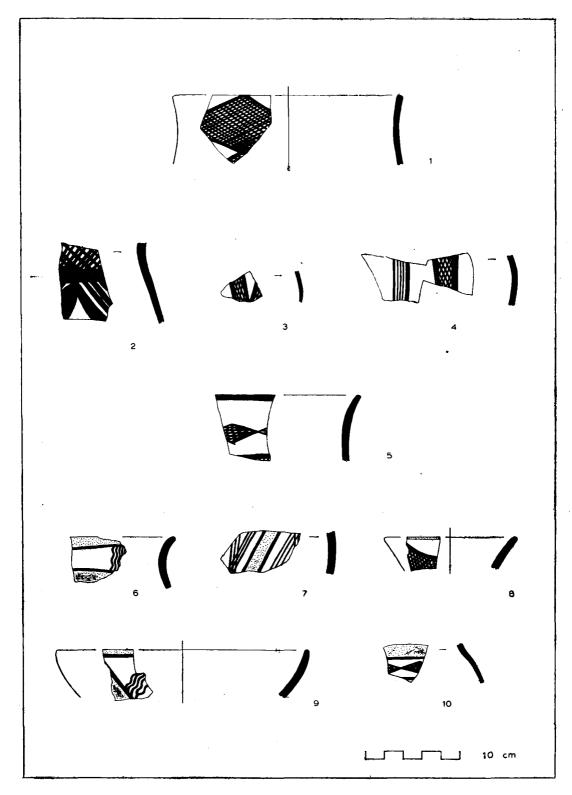


Fig. : 2