2. FU TEI WAN

THE SITE

During the initial survey it had become clear that there were at least two, possibly three sites in the Fu Tei Wan valley: the back beach sand banks, possibly dividing into the kiln area to the south and the better formed sand bar near the mouth of the stream to the north, and the upper plateau. In this report, Fu Tei Wan will refer to the sand banks behind the beach, and Fu Tei to the plateau overlooking the beach and valley. The two zones proved to have dramatically different deposits.

The investigation of Fu Tei Wan began with the sand bar near the mouth of the stream. An adze and numerous sherds were found in this area during the survey, and the Six Dynasties jar discovered in 1960 by Mr. Ho Yan-ning also came from there. He pinpointed the spot near abandoned pigsties, and a grid for test excavation was laid out.

The only remarkable feature about the site was its low elevation compared with other similar cultural deposit-bearing sand banks in Hong Kong. The sand bar seemed however relatively well-preserved, gradually sloping down to the present beach.

EXCAVATIONS AT FU TEI WAN

The first four squares to be excavated revealed the essence of the site; it had been severely disturbed and most if not all of the prehistoric material had been re-deposited in more recent times. Two questions then dominated the work at Fu Tei Wan: what agency had been responsible for the disturbance of the prehistoric deposits, and when had the disturbance and redeposition taken place.

In Squares A, B and C virtually the same sequence was present, the only difference being that the soil in A was less sandy and harder. All three squares had firm brown sandy soil with stone rubble concentrated in layers and in patches. This main stratum of alternating layers of rock rubble and soil was ca. 1.5 m thick, and contained large amounts of Sung, Tang, Late Neolithic and Middle Neolithic pottery, stone tools and flakes. Much of the Neolithic pottery was rolled, but sometimes clusters of contiguous sherds were found, with no evidence of movement whatever, alongside Tang or Sung sherds in the same context. It was obvious that the site had at one time been very rich, and that the material had not moved far from its original position. But it was confirmed many times, in almost every square opened at Fu Tei Wan, that the re-deposition had been total; there did not appear to be any pockets of undisturbed, in situ Neolithic deposit, and historical sherds were found along with the Neolithic down to the bottom of the cultural material.

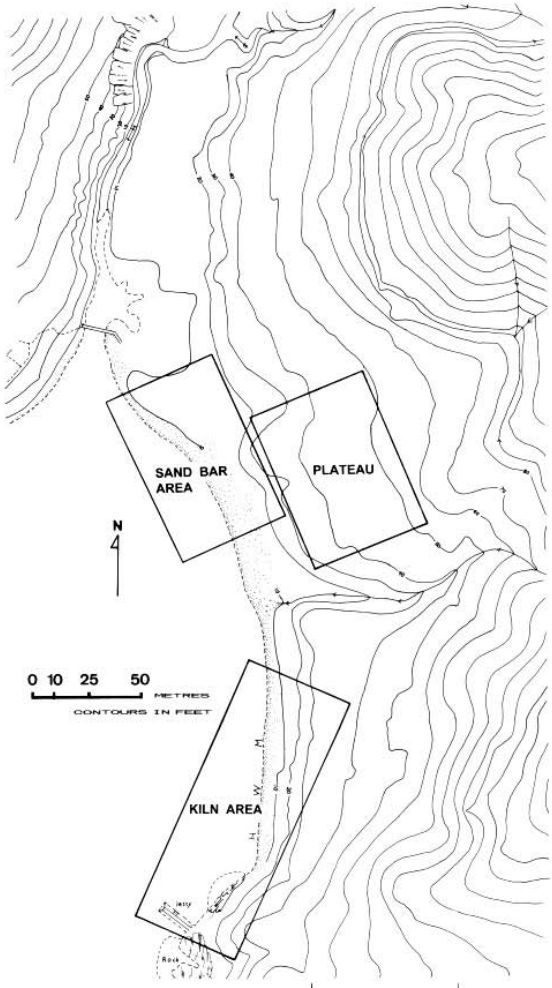

Figure 2.1 -- Map of Fu Tei Wan showing the three areas of excavation. See Figures 2.2, 2.12 and 3.2 for detail of each area.

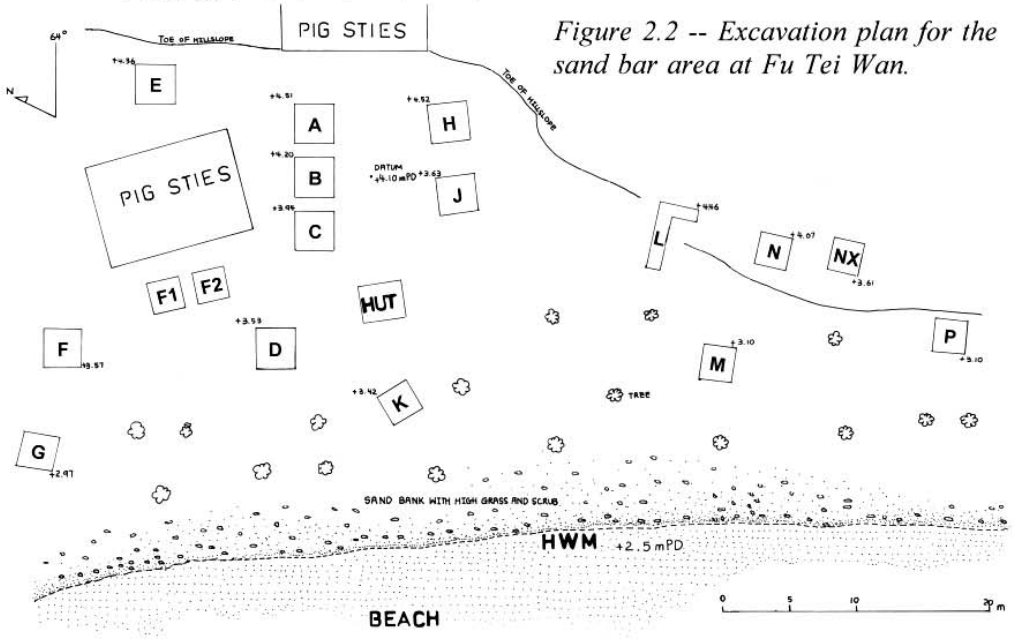

Figure 2.2 -- Excavation plan for the sand bar area at Fu Tei Wan.

Figure 2.3 -- General view of Fu Tei Wan from the jetty facing North.

Figure 2.4 -- Excavation in progress in Squares A, B and C.

Figure 2.5 -- Square A northeast wall.

Figure 2.6 -- Square H northeast wall.

Under this main re-deposition layer was a loose yellow sand with small pebbles and very small bits of pottery, to a depth of 240cm. Beneath this was a greyish white sterile sand to 280 cm, at which point water was encountered. In Square C, there was a grey clay instead of the grey sand. In Square D, the top layer was much more sandy and had modern material, the cobble layer much thicker and the grey clay layer higher (at 140cm) and more sharply defined.

Square E had much harder, more compacted and less sandy soil, with fewer artifacts, but once again occasional Tang pieces belied the re-deposited nature of the

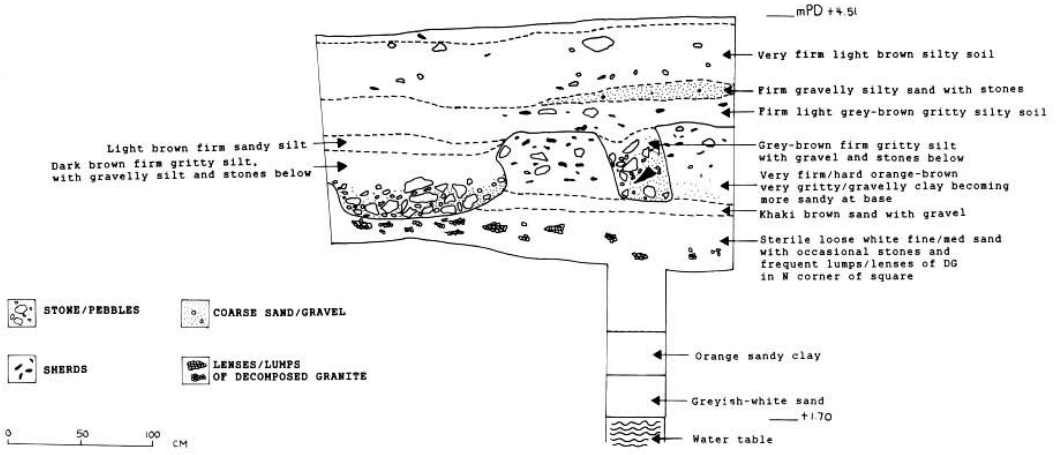

Figure 2.7 -- Profile of Square A northeast wall.

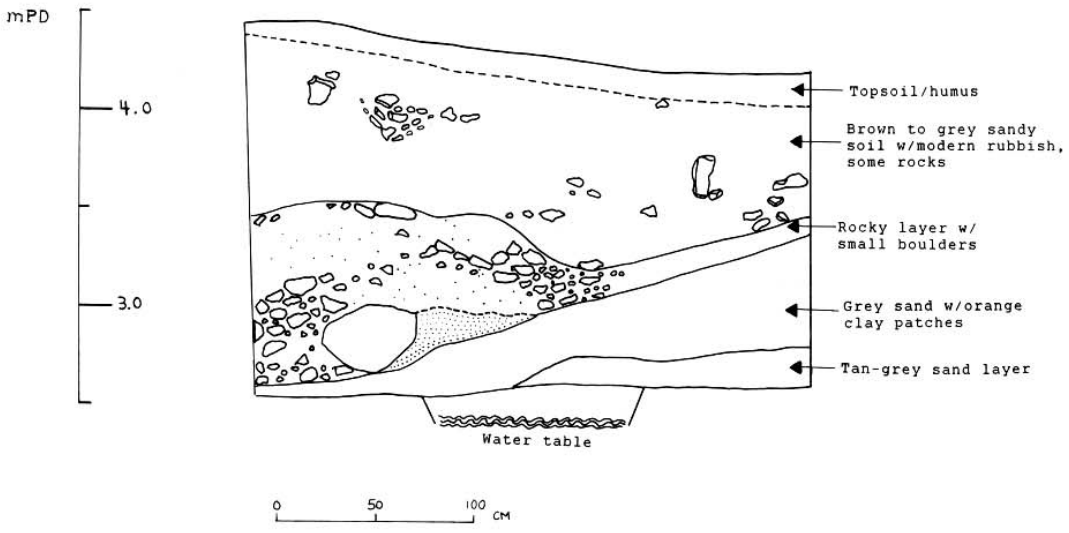

Figure 2.8 -- Profile of Square H northeast wall.

matrix. Squares F and G had very loose sand with Neolithic material only, but with stone rubble concentrations similar to those seen in other squares. There were no clusters of sherds, and very few stone flakes, so the typical signs of an in situ deposit were lacking. The possibility that this loose sand may actually represent a Neolithic deposit cannot be completely ruled out. However in Squares F1 and F2 a similar loose brown sand had Tang, Sung and Neolithic potsherds throughout. A particularly impressive cluster of chalky Middle Neolithic sherds was found in the upper part of the deposit with Sung Pottery and a Sung coin ony a few cm away.

Figure 2.9 -- Cluster of chalky sherds in Square F1.

In Square G the underlying sterile grey clay layer at 130 cm depth was again encountered; it was more organic, containing leaves, fragments of wood and one large piece of flat wood, probably originally a log compressed under the weight of the overburden. Samples of the plant material and clay were taken for analysis, and the wood was dated by C-14 to 6160 +/- 60 BP.

Squares H and J were sited next to an abandoned well mentioned by Ho Yan-ning as near the find spot of the Six Dynasties jar. Under layers of modern rubbish, a firm silty sandy soil with pebbles and rock rubble had Sung, Tang and Neolithic material down to 110-130 cm. Below was a grey sand with no artifacts.

Squares K, L, M, and P had very few artifacts, no prehistoric material and modern objects down to DG or water. Squares N and NX had a different and problematic stratigraphy : hillslope soil to 60 cm where a sharp change to firm light brown sand occurred. A complete Tang pot (FTW77) in fragments was found in this sand, with no

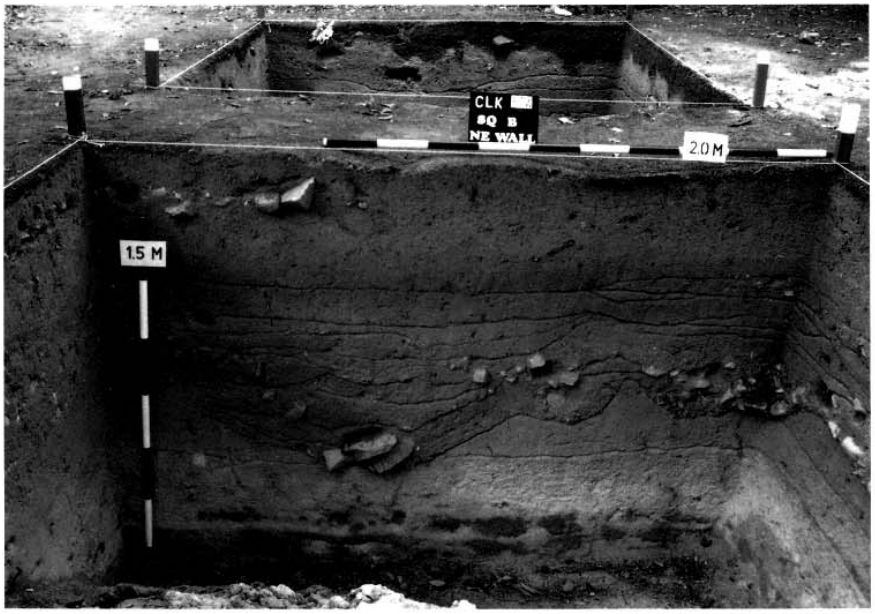

Figure 2.10 -- Square B northeast wall.

Figure 2.11 -- Floor of Square B at 60 cm.

other artifacts. The beach sand ran under the hillslope with no upward slope, but it was unclear whether the upper soil represented a gradual extension of the hillslope over an old beach deposit or soil moved during recent construction.

The northern beach and back beach at Fu Tei Wan are divided from the southern part by the mouth of a large ravine which also cuts through the upper plateau. Trenches Q and R were sited in the southern part, and the principal objective was to test for kiln debris and possible hidden kiln structures. Surprisingly, nothing of archaeological interest was found. Trench R was only a few metres from the intact kiln yet did not yield a single firebar or Tang potsherd. In both trenches only Ching/recent material was found, and the deposits were shallow (80-90cm). It seems highly likely that the original Tang deposits

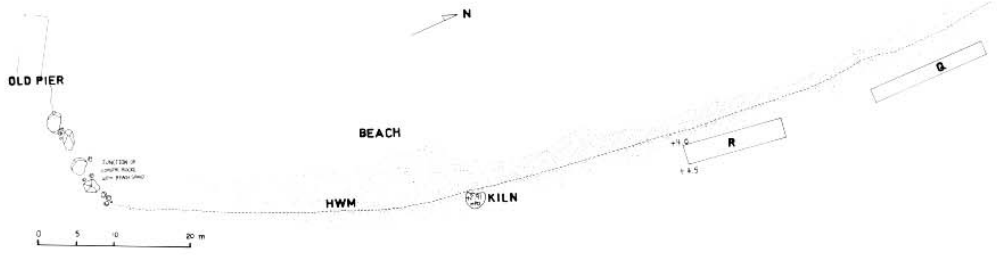

Figure 2.12 -- Excavation plan for the kiln area at Fu Tei Wan.

Figure 2.13 -- Stone wall in Trench Q.

and other kiln structures were completely destroyed by marine erosion processes, as indicated by the significant change in the coastline since 1905 (discussed in chapter 1 above).

Trench Q did produce a stone wall right against the hillslope, and present villagers were not aware of it. A fragment of Ching ware under one of the stones indicated a recent age, however, and it probably was part of the former field system surveyed in 1905.

The Tang kiln (see Figure 2.14-17) was surveyed and recorded, and the

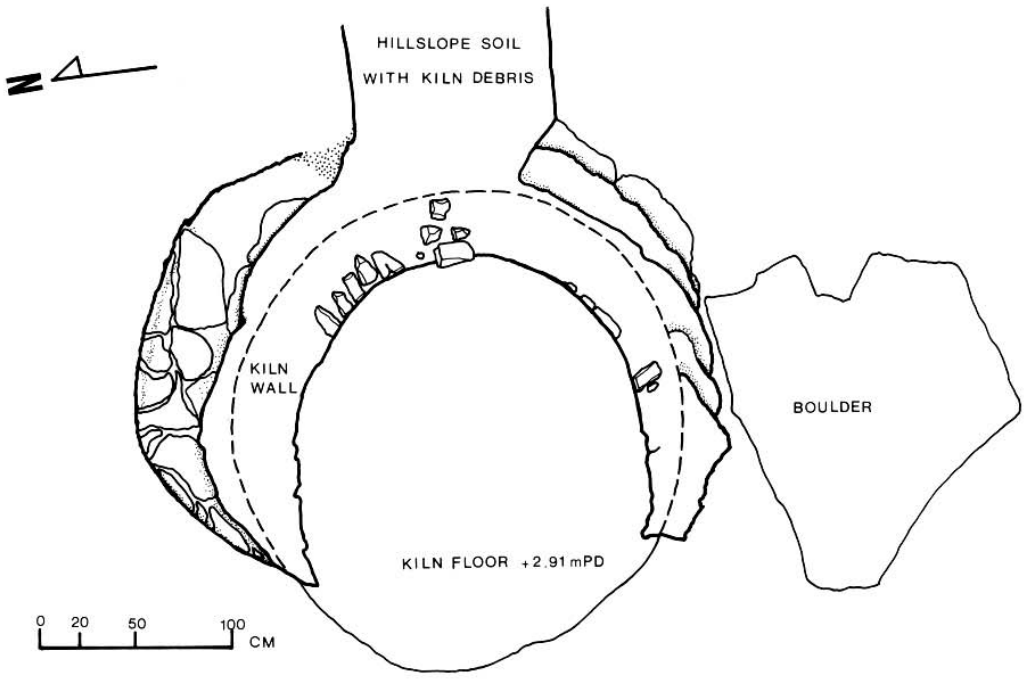

Figure 2.14 -- Plan of the kiln at Fu Tei Wan.

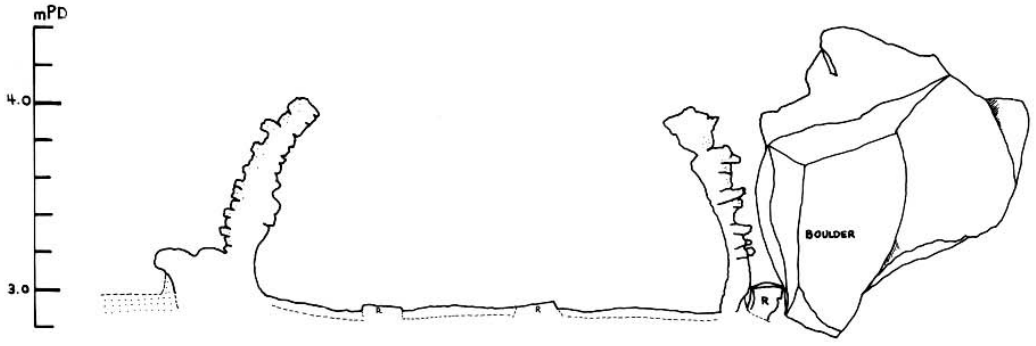

Figure 2.15 -- North-south profile through the centre of the kiln.

Figure 2.16 -- Excavation in progress at the kiln.

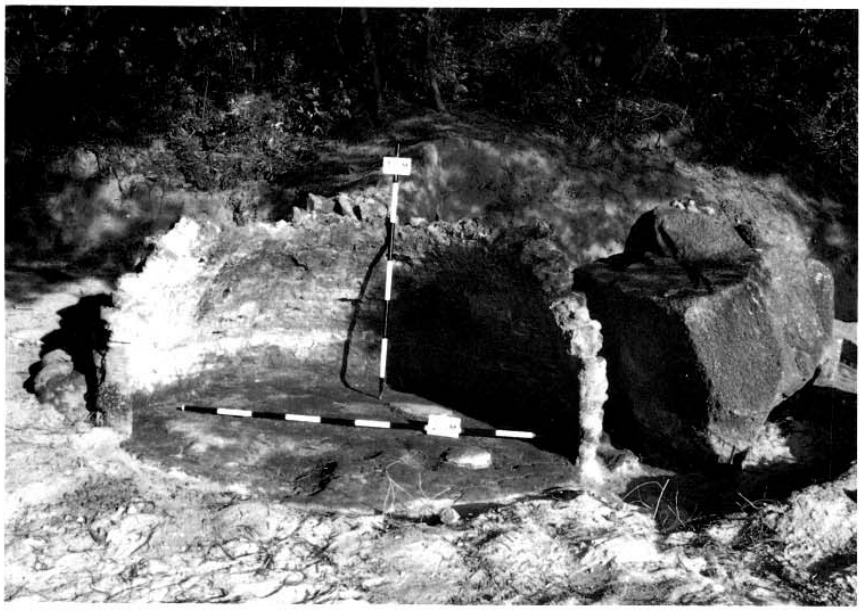

Figure 2.17 -- The kiln after final excavation.

surrounding area excavated. Only the soil immediately behind the kiln had intact cultural deposits (consisting of kiln debris and few Tang potsherds); this surviving remnant of kiln activity deposit was certainly preserved by the shelter provided by the kiln structure. Deposits on either side of the kiln were probably eroded decades ago. Two interesting features of the kiln were noted : a phalange around most of the base, and a clearly cut trough in the DG in front of the structure. It appeared that a pedestal had been created (probably carved out of the DG) prior to the construction of the kiln, and possibly fired before the base of the kiln was built.

DESCRIPTION OF FINDS FROM FU TEI WAN

The pottery from the northern part of Fu Tei Wan falls neatly into five assemblages: Ching/recent, with no pieces dateable earlier than 19th century; Sung; Tang; Late Neolithic; and Middle Neolithic. Most of the pottery was very fragmentary, and only a few partial reconstructions could be achieved. Chipped and polished stone tools were present in some quantity, but their affiliation with either Middle Neolithic or Late Neolithic phases could only be guessed. The obvious gap is the Bronze Age, as no piece of the typical high-fired geometric pottery was unearthed. Only one fragment of kiln firebar was found at the northern end of the beach.

The Tang and Sung glazed pottery (see Figure 2.18) had the usual traits of the period, without any special characteristics, and only one bowl was reconstructible. There was a large amount of the typical plainwares of each period; the one restorable pot has a typical wire-cut base. The coin is a *shing-sung tung pao* dateable to 1039-1053 AD.

Late Neolithic pottery was represented by typical soft geometric wares (see Figure 2.18) with a variety of patterns (see Figure 2.19), and by coarse corded rims with seatings and sharply everted shapes (see Figure 2.20). Coarse bars sometimes with joints also derive from the Late Neolithic, and the only other instance of these artifacts was at the Late Neolithic layer at Sham Wan Tsuen. Middle Neolithic pottery included many chalky incised and perforated foot-rims, and coarse corded with super-incising. The few pieces of coarse incised pottery is more difficult to assign, but probably belongs to the Late Neolithic/Middle Neolithic transition (see discussion below under Sham Wan Tsuen).

Most of the stone tools cannot be assigned to Middle Neolithic or Late Neolithic phases because of the lack of stratigraphy and the absence of any reliable typology. Almost all of the types were also found at the site at Fu Tei, which was exclusively Middle Neolithic, and a detailed description will be given in the next chapter. The types not seen at Fu Tei include a finely made projectile point (see Figure 2.23), a quadrangular adze, a bark cloth beater (see Figure 2.25), a fragment of a drilled stone ritual? object (made of a non-Hong Kong stone type), and a small rough-out for a rectangular pendant. With the exception of the barkcloth beater, all of these artifacts are known to occur in the Late Neolithic, and have not been reported from the Middle Neolithic.

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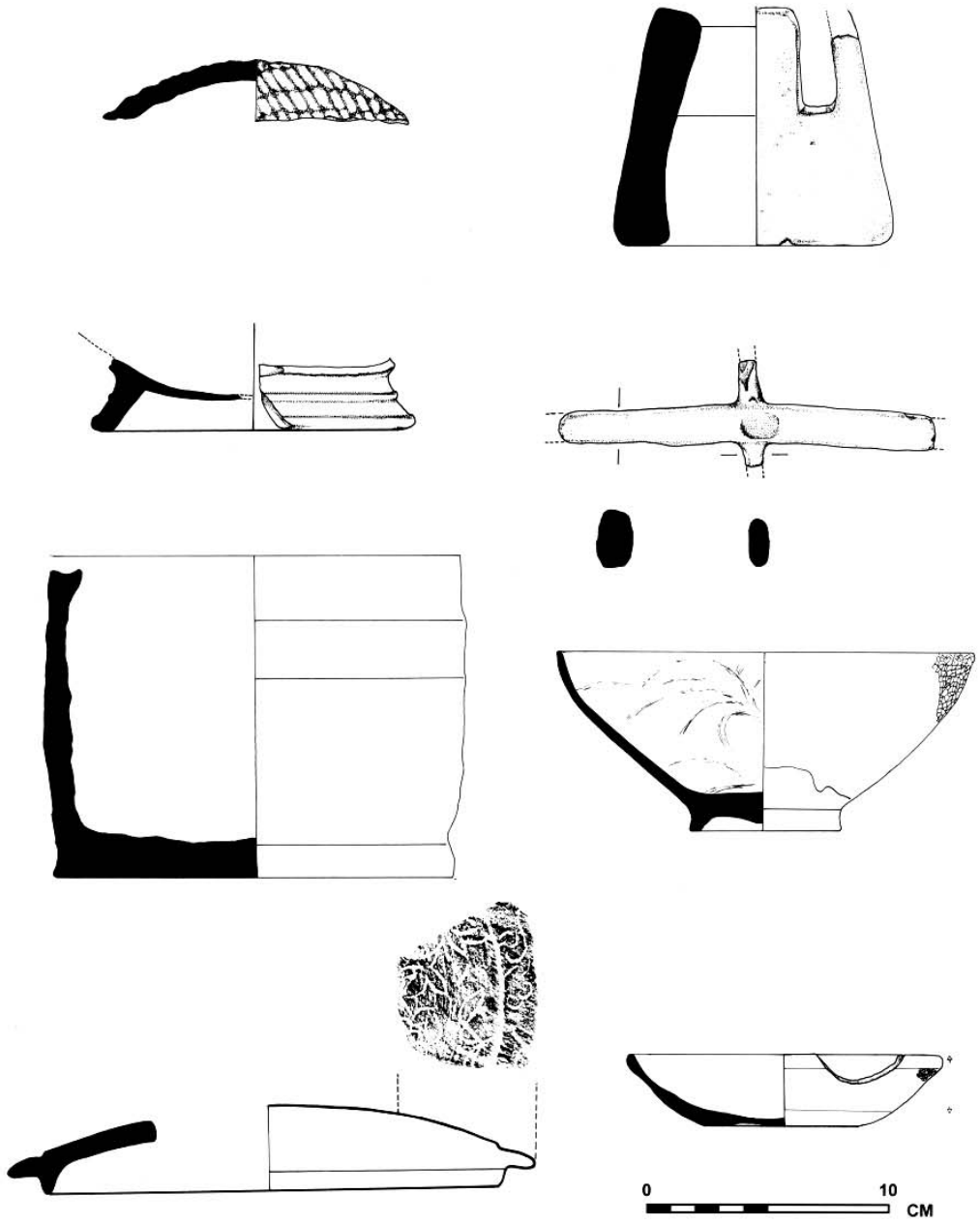


Figure 2.18 -- Pottery from Fu Tei Wan: top row - soft geometric lid and coarse potstand; second row - chalky footrim and coarse firebar; third row - plain Tang pot and Sung crackle glaze bowl; bottom row - plain Sung lid and Sung crackle glaze bowl.

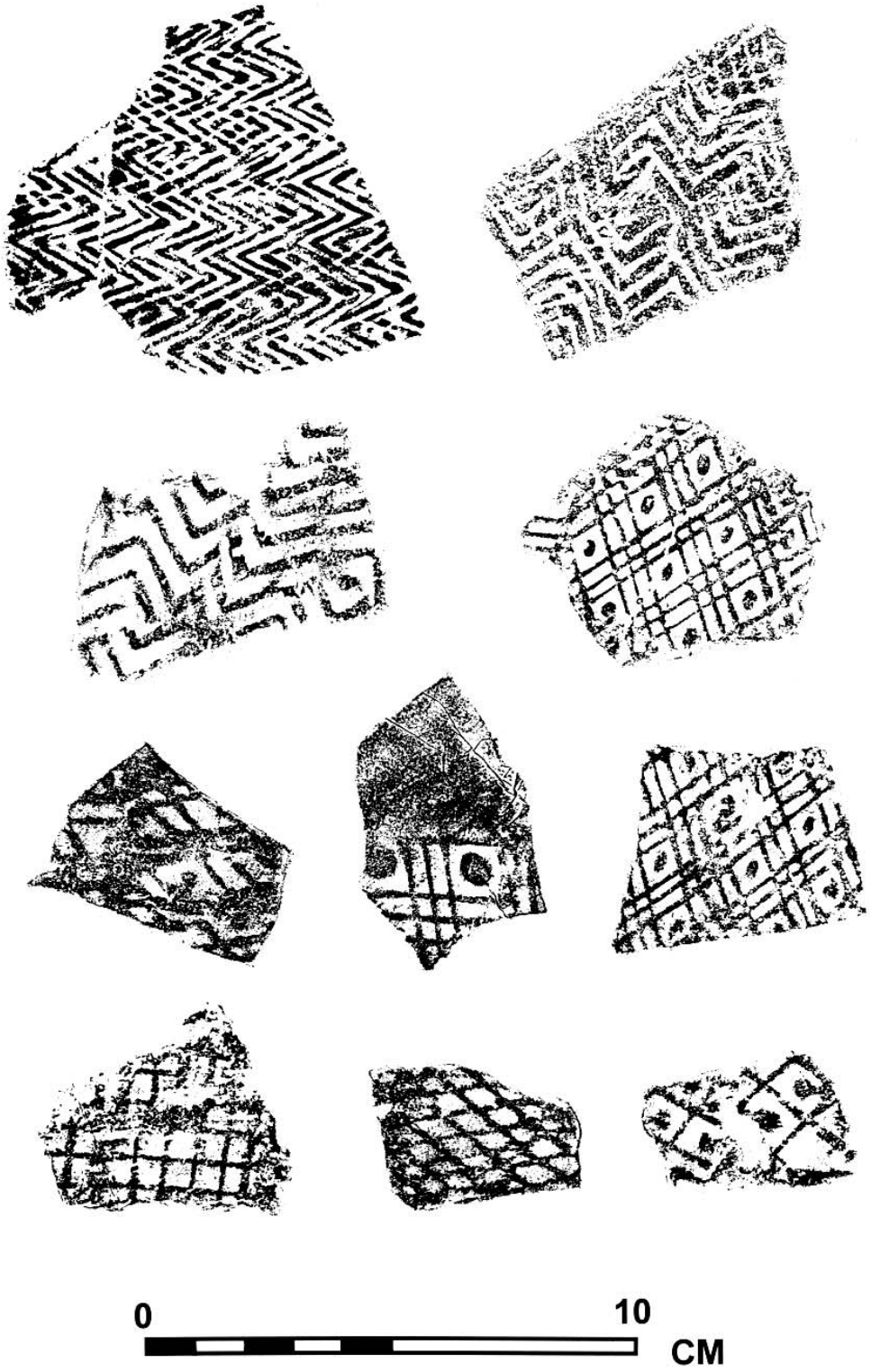


Figure 2.19 -- Patterns on soft geometric pottery (Late Neolithic).

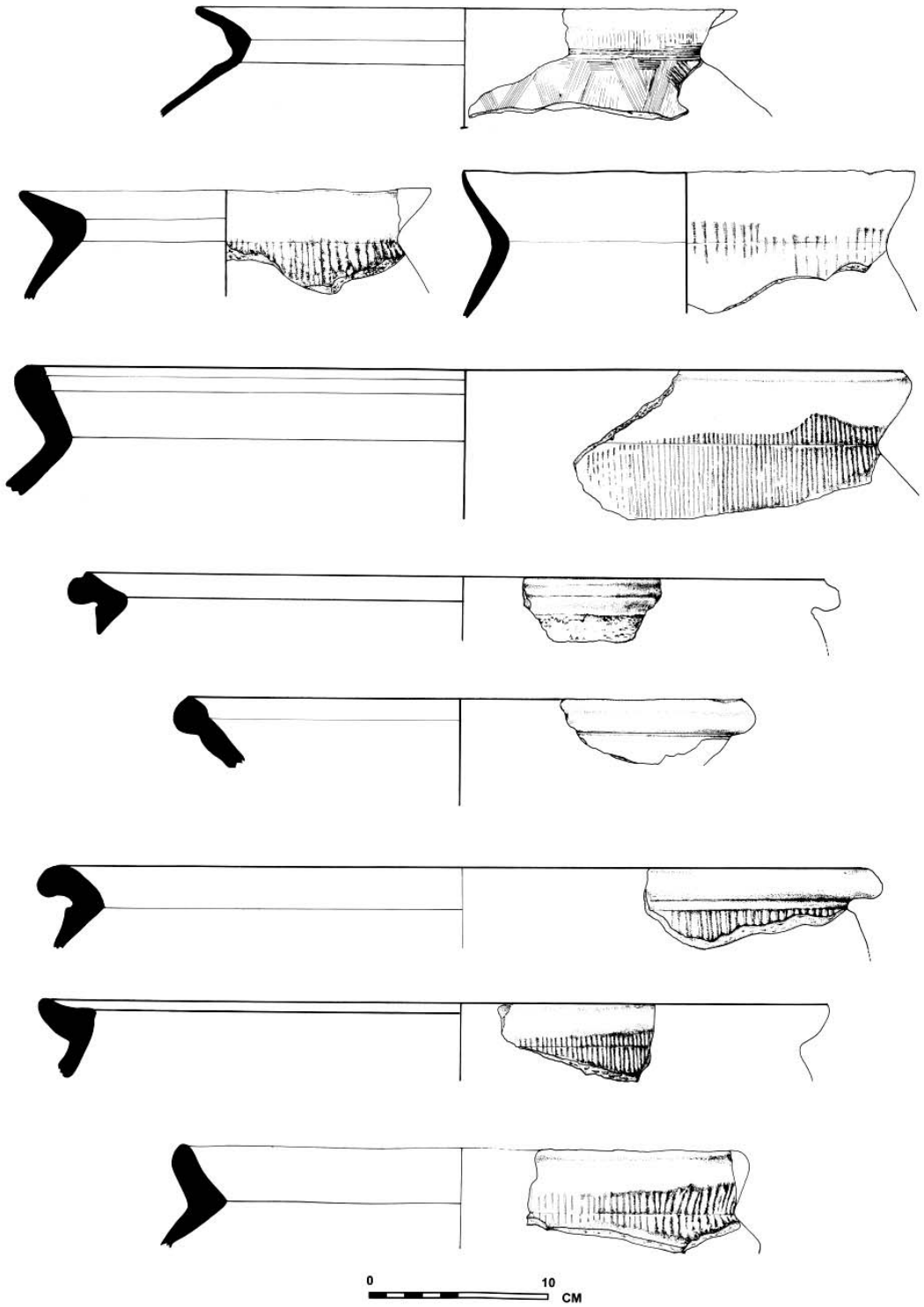


Figure 2.20 -- Coarse corded rim sherds: top four probably Middle Neolithic; others Late Neolithic.

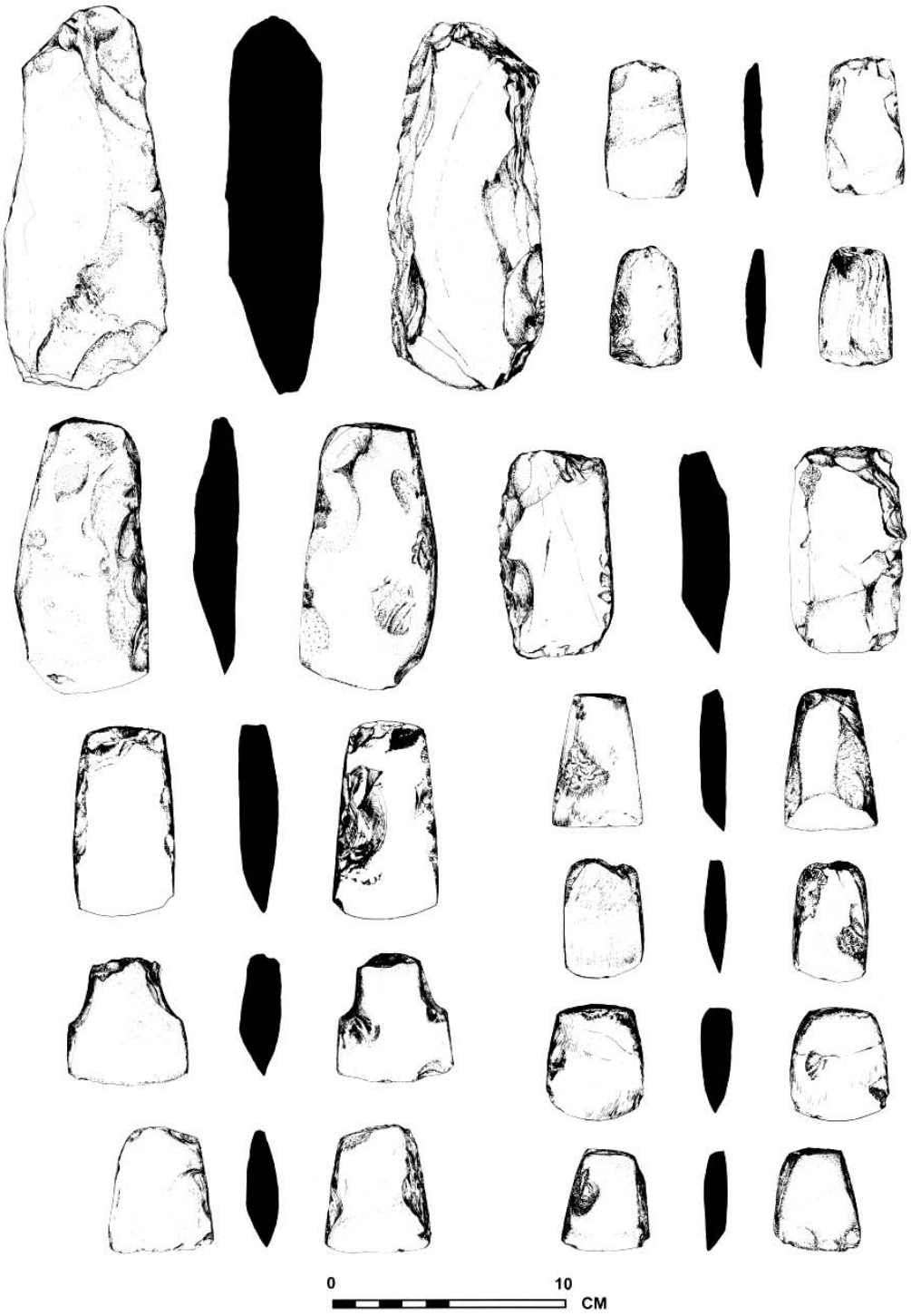


Figure 2.21 -- Adzes from Fu Tei Wan (Middle/Late Neolithic).

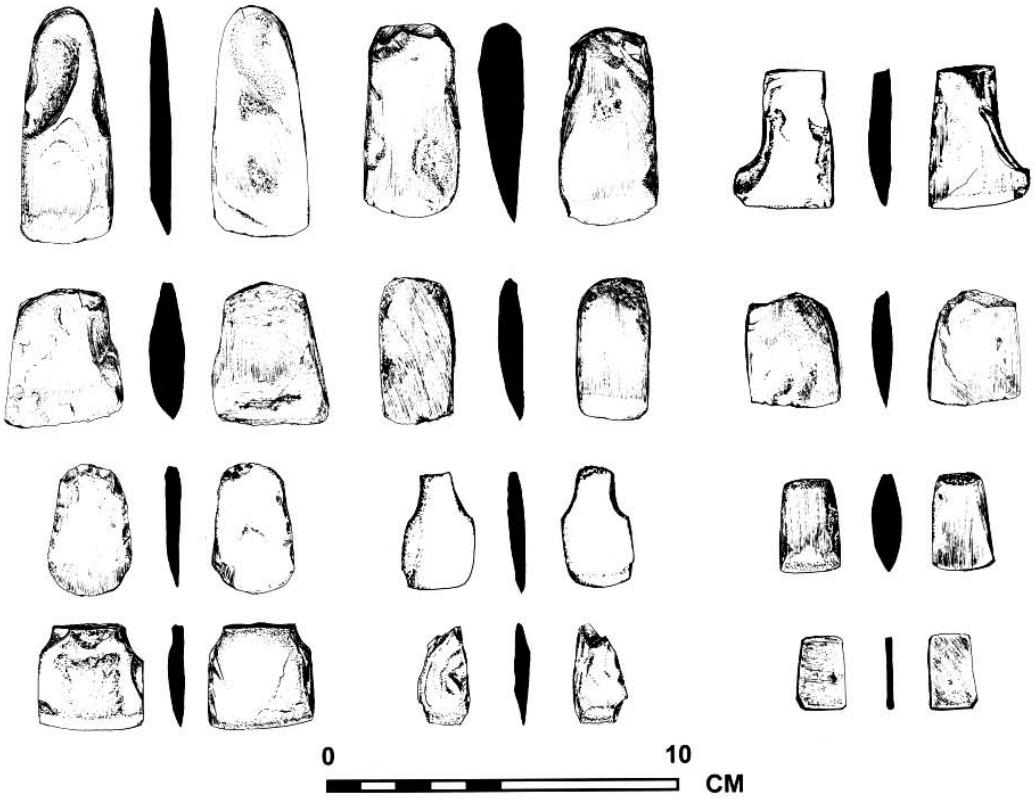


Figure 2.22 -- Small adzes from Fu Tei Wan (Middle/Late Neolithic).

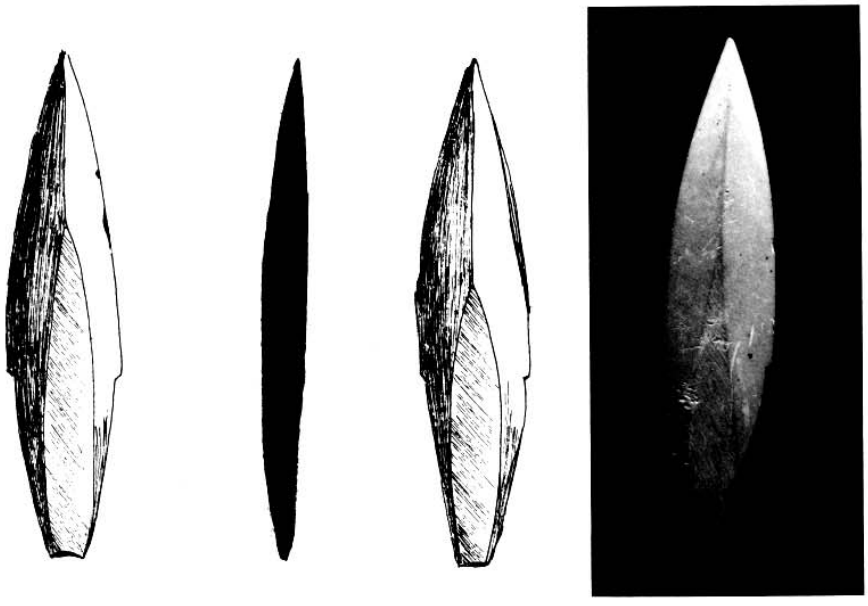


Figure 2.23 -- Polished stone projectile point (probably Late Neolithic).

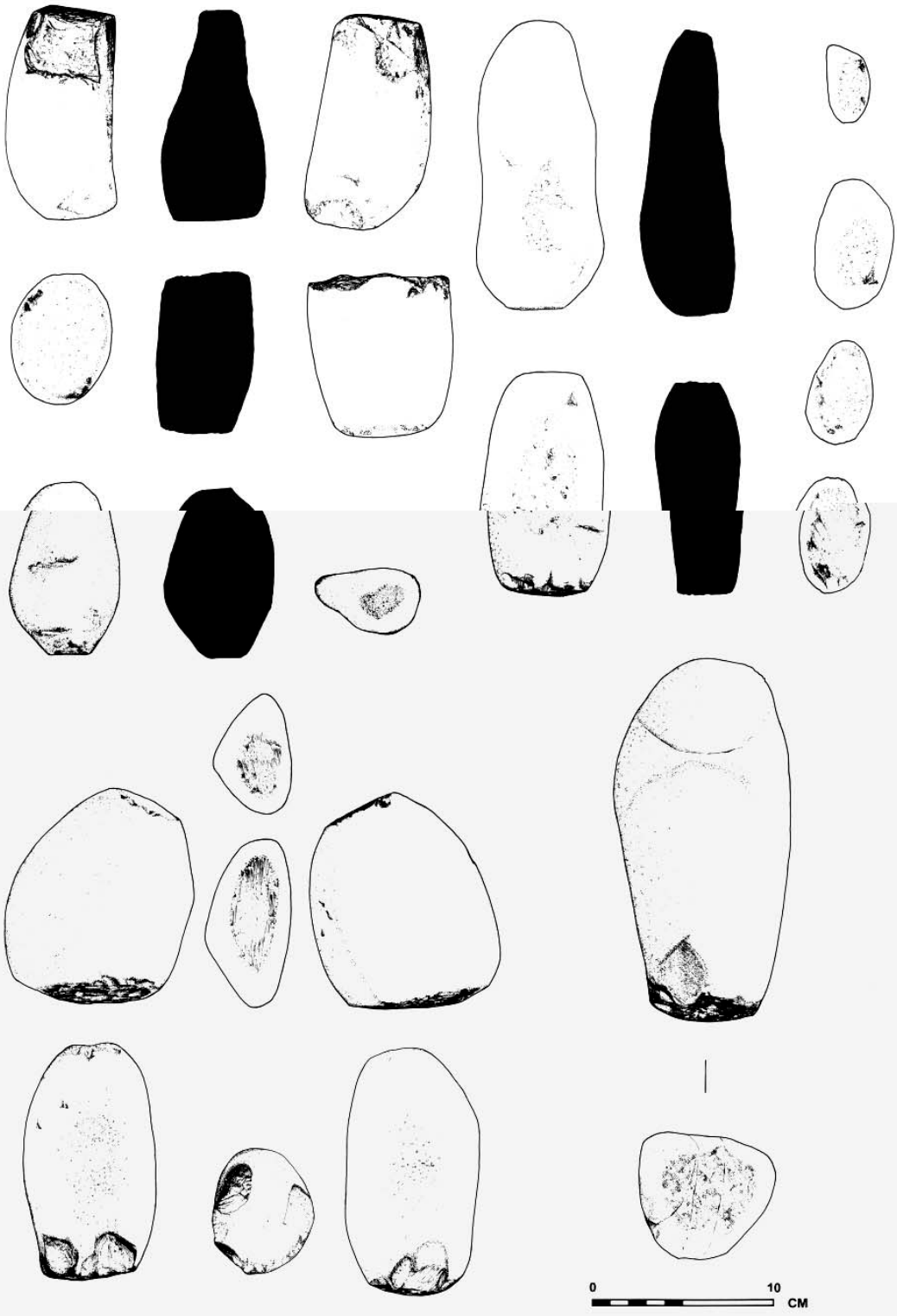
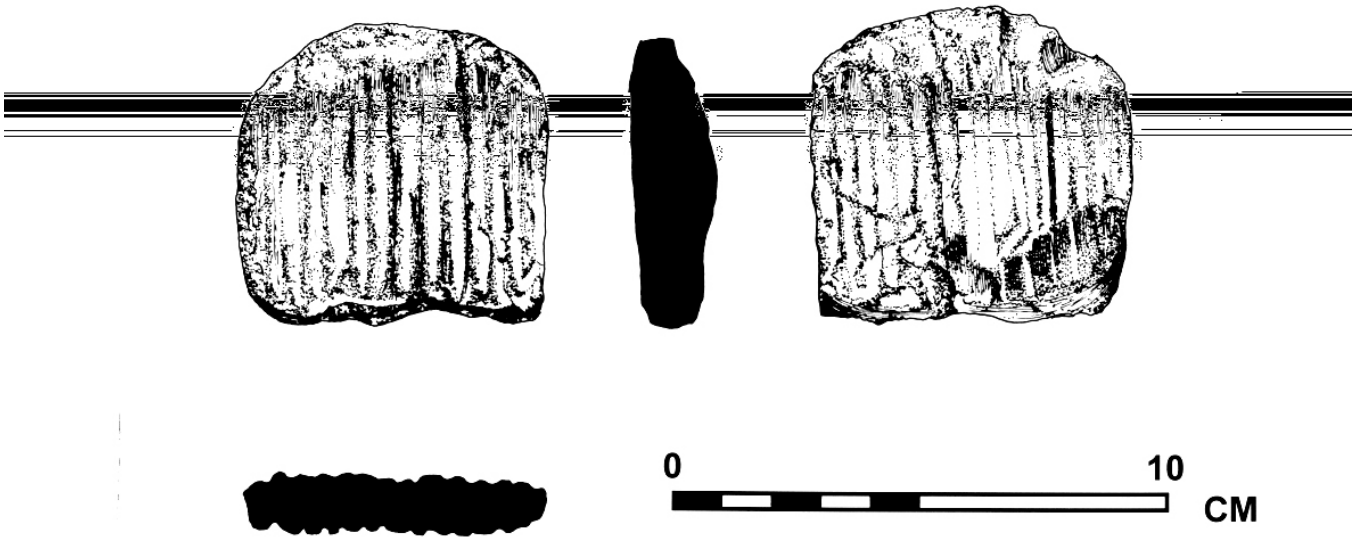


Figure 2.24 -- Pebble grinders from Fu Tei Wan (Middle/Late Neolithic).

The bark cloth beater deserves special mention, as similar types found in South China are almost always referred to as "pottery stamps". This is highly likely to be incorrect, since the type is well known from Southeast Asia as a bark cloth beater usually mounted in a wooden handle. A comparable example has been published from an ethnographic collection in the Celebes (Ling, 1963: plate VII of chapter 8). There is virtually no pottery from the Fu Tei Wan site or from Hong Kong generally that bears the pattern which this beater and a very similar one from Man Kok Tsui (Chia and Ward, 1979:98) would have produced.



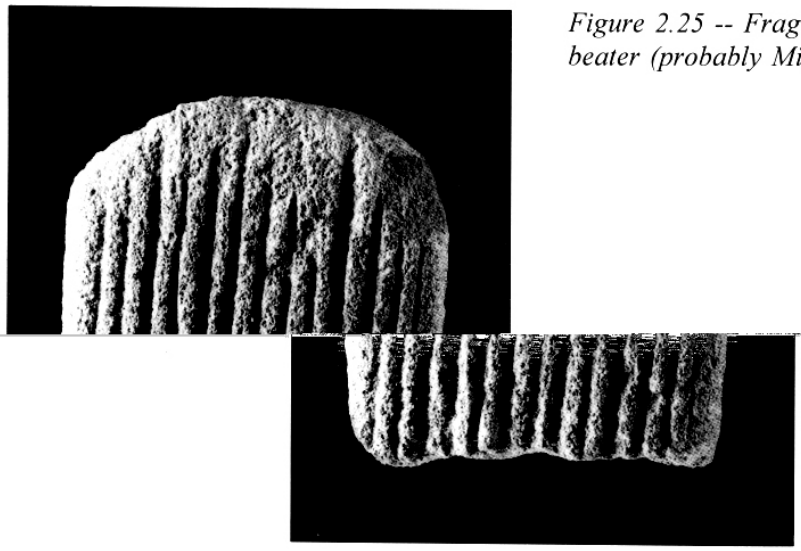


Figure 2.25 -- Fragment of a bark cloth beater (probably Middle Neolithic).

The adzes from Fu Tei Wan are mostly of a tapering rectangular shape (see Figure 2.21) ; a few are shouldered or semi-shouldered. There were quite a few very small adzes (see Figure 2.22), some of which appear to have been made from flakes of larger ones. The main pebble tool type was the grinder (see Figure 2.24) ; many had more than one flattened surface. Pitted pebbles, grooved and concave polishing stones were also unearthed.

Four round stone discs (see Figure 2.26) were found together in Square J and were probably in their original discard/loss position. They should thus date to the Tang/Sung period rather than the Neolithic. These pieces appear to be weight measures, as their weights are in almost exact proportion to each other, except for the smallest (25g) which is broken around the edges. If it is taken as representing one *leung* (37g), the others (105, 185 and 440g) are probably three , five and twelve *leung* (113, 185 and 444g). However, similar stone tools are reported from Neolithic sites in Guangdong, and believed to be grinding tools.

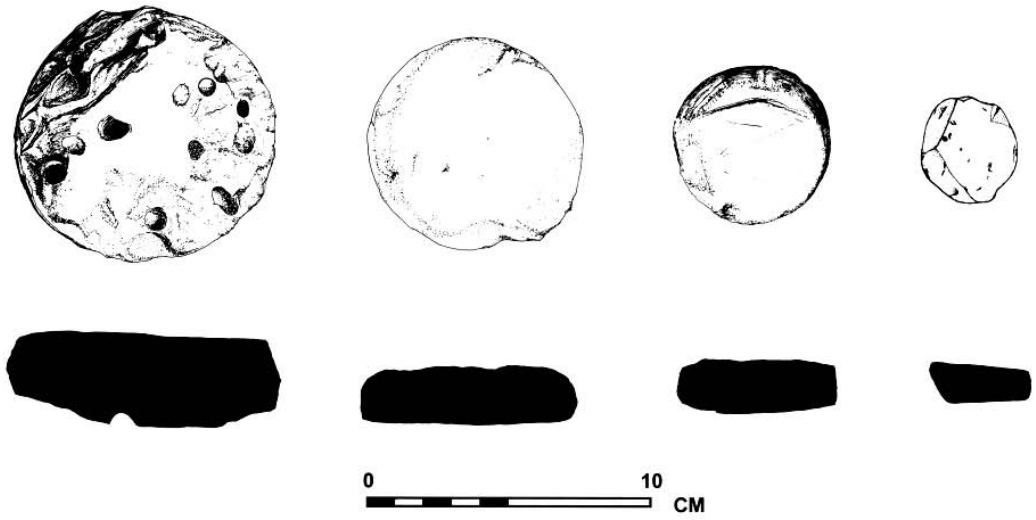


Figure 2.26 -- Set of four stone discs (Neolithic or Tang/Sung).

Much kiln debris was found behind the kiln, with the familiar firebars and bricks, but no pieces of structural significance. The few pottery fragments were all Tang or Ching/recent.

ANALYSIS OF MATERIAL FROM FU TEI WAN

No bone, shell or other organic material was recovered from the excavation, except in modern rubbish layers. Stone artifacts and flakes examined by Richard Langford of the Geotechnical Engineering Office; most were found to be local (North Lantau), a few

found to be of rock occurring on Chek Lap Kok, while a few were non-Hong Kong, either agate or marble with a black patina.

Samples of the clay from Square G were analyzed for pollen by Mrs. K.F. Yu of the Dept. of Geography and Geology at the University of Hong Kong. Her report is included at Appendix 5. Leaves from the clay were examined by Dr. Richard Corlett of the Dept. of Botany at the University, who was able to identify a shade-tolerant creeper; he noted however that reference collections did not exist in Hong Kong to allow further identifications to be made.

The wood sample from the grey clay layer in Square G was dated to 6160 +/-60 by Beta Analytic (BETA-42854), calibrated by dendrochronology to 5240-4940 BC. This date places the clay formation slightly earlier than the period of human occupation of the site. Charcoal from the floor of the kiln was C-14 dated in 1982 to 1280 BP +/- 70 (HAR-4994), calibrating to 610-880 A.D.

DISCUSSION OF THE FU TEI WAN SITE

The excavation of the sand bar near the stream mouth indicates that a rich site once existed there, but it had been re-worked and material from the site re-deposited in the present sand bar. It seems likely that the site was destroyed by erosion due to water run-off from the hillside immediately above the present site, and similar run-off processes are acting on the site today. The concentrations of stones in small gullies in the sand bar suggest that the process was not massive and dramatic, but incremental. Movement of the artifacts has not been great, as many of the potsherds have sharp edges, and clusters occur where presumably large sherds or near-complete pots were dislodged from their original in situ position and transported a short distance, cracking and breaking in the process.

The possibility that the re-deposition was caused by human agency, such as in creating terraces for farming or constructions is considered unlikely, owing to the absence of modern artifacts below the topsoil, and the natural rather than haphazard placement of stones in the micro-gullies. A combination of agencies is possible, but the date could not be later than Sung, and there is no indication at all that the Sung occupants undertook any construction. It is more likely that the continued use of the plateau and upper hillslopes for farming and possibly of fuel collection for the kiln industry set in motion the natural processes which destroyed the in situ Neolithic deposits in the beach areas.

We can be certain that more than one kiln was present at Fu Tei Wan in Tang times, as kilns on other sites always occur in groups. The erosion and destruction of the other kilns is probably the result of very recent processes in this century, as discussed above in chapter 1. The survival of the remaining kiln may have been due to its fortuitous location up against the hillside in firmer soil, whereas the others were most likely in loose sand as on most kiln sites.

The Six Dynasties jar (see Figure 2.27) discovered in 1960 presents something of a mystery; no other complete jar or Six Dynasties material was found; it would appear to have been an isolated burial if in situ. It may also have survived intact after a short movement down the hillside. However, no Six Dynasties material was found on the plateau.

During the initial work at Fu Tei Wan the general feeling was that the Neolithic material had been transported or brought down from the adjacent lower hillslope. This possibility was later excluded for the reasons cited above, and the fact that no Late Neolithic material at all has been found on the plateau and lower slopes. Test pits on the slope just above the sand bar showed no deposit, and "DG" at only 20-30 cm.

The date of ca. 5000 BC from the clay deposit which underlies the present sand bar and probably predated any sand bank formation at Fu Tei Wan provides an opportunity for pollen studies to reconstruct the environment immediately prior to human occupation. In conjunction with other such studies it may eventually be possible to gain information on how the Neolithic people altered or impacted on the natural environment.

Figure 2.27 -- The Six Dynasties jar found at Fu Tei Wan in 1960.

Figure 2.28 -- Memories of the Fu Tei Wan excavation: Mr. Lin (left) (d. 1992) and Mr. Ko (centre), both long-time residents who gave such gracious, generous assistance to make the excavation possible; "Sok-kung" ("grandpa") Lau (d. 1993), elder member of the team of workers from Lung Kwu Tan.

Figure 2.29 -- Lunch at Mr. Lin's.