

1. INTRODUCTION, HISTORICAL RESEARCH AND SURVEY

INTRODUCTION AND RESEARCH STRATEGY

The decision to build Hong Kong's new airport on Chek Lap Kok was announced by the Governor in 1989. The archaeological impact of this decision had been anticipated, and a major salvage operation had been conceived by the Hong Kong Archaeological Society to investigate thoroughly the island's archaeological potential and to conduct a study of its history from oral and documentary sources.

One of the important guiding principles in setting up the research project was to examine every aspect of the island's history, including paleo-environment, settlement patterns in historical times, distribution of sites, recent graves, etc.

Apart from the major Tang kiln site at Sham Wan Tsuen, little was known about the potential of the rest of the island, or about the other areas in the large valley at Sham Wan Tsuen itself. It was clear that a considerable amount of time would be required for survey and testing, in order to locate sites and to determine their extent. The original proposal for the project is given below.

"PROPOSAL FOR AN ARCHAEOLOGICAL/HISTORICAL STUDY OF CHEK LAP KOK ISLAND"

INTRODUCTION

The island has been known to have archaeological sites since the 1930's, when Walter Schofield recorded Neolithic materials at Fu Dei Wan and Kwo Lo Wan. In 1979, when the possibility of a new airport on Chek Lap Kok was raised, the Archaeological Society began a study of sites on the island, focusing its attention on the sand bar at Sham Wan Tsuen.

It is known that the island has significant cultural deposits of the Neolithic, Tang and Sung periods. From the recorded history of the area, it is quite likely that other periods, notably Ming and early Ching, are also represented in the existing archaeological record.

The Hong Kong Archaeological Society therefore proposes to organize an intensive research project to examine all aspects of the history of the island, from the evolution of its environment in the Late Pleistocene and its early human occupation at ca. 4000 B.C.,

through the early historical periods and into the 20th century.

ORGANIZATION

an integrated series of standards and investigations is envisaged, with a multi-disciplinary approach involving specialists of various disciplines. Intensive archaeological excavation would be augmented by documentary research, anthropological and environmental studies.

The principal focus of the project would be archaeological survey, testing and excavation of all areas, followed by full-scale excavation of important sites. A field team consisting of a director, three deputy directors and three site assistants would be engaged to carry out this work. Specialist studies in relevant areas of research would be commissioned.

A prominent archaeologist with much experience in Southeast Asia (Prof. Richard tler) would assist in the formative stages of the project.

The project would begin in July 1990 and continue for 12-16 months, the exact time depending on the importance of archaeological sites located and the need for excavation prior to their destruction.

The objective of the project would be to extract all important geological/historical data from Chek Lap Kok by August 1, 1991, when major action work is slated to begin.

PARAMETERS OF THE STUDY

NT HISTORY AND TRADITIONS

An initial oral history survey is now being conducted by historical geographers at the University of Hong Kong. It is proposed to expand this investigation with a research assistant supervised by Dr. Richard Irving of the Dept of Geography. The project would concentrate on 19th/20th century land use, settlement patterns and recreation activities.

Y HISTORY

A documentary search would be commissioned, to include English and Chinese records; relevant genealogies would be examined. A survey of all graves, structures and other features would be carried out.

AEIOLOGY

A complete survey of the island's coastline, valleys and uplands would be

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conducted, in order to record rock carvings, surface outcrops of archaeological deposits, and potential sites to be tested.

The important sand bar site at Sham Wan Tsuen would be completely excavated and documented. Experts in engineering, architecture and ceramic history would be engaged for detailed examination of the lime kilns and the pottery from the site, including those previously excavated. Former Chairman of the Society and director of excavations at Sham Wan Tsuen, Mr. Hugh Cameron, would return to Hong Kong to work with the project.

A testing programme of several weeks would be devoted to clarifying the potential of the sites at Fu Dei Wan, Kwo Lo Wan, and others revealed by the surveys. Full-scale excavation would then be undertaken of any areas deemed to have valuable information to be salvaged before the destruction of the sites.

SHAM WAN TSUEN SEABED STUDY

As the Tang lime industry at Sham Wan Tsuen was entirely dependent on marine transport, artifacts and ship remains may be preserved in the shallow bay fronting the site. Divers would be engaged for a visual survey of the seabed floor at Sham Wan. Dredging of selected areas of the seabed would be carried out.

PALEO-ENVIRONMENT

A geological/archaeological excavation would be undertaken in the valley floor at Sham Wan Tsuen, to collect pollen, shells, organic materials and other information pertaining to the development of the environment before and during the human occupation of the sand bar and valley itself. The results of this research would be correlated with data already obtained from offshore engineering studies.

PRESERVATION

An attempt would be organized to remove from Sham Wan Tsuen a complete Tang lime kiln structure, to be conserved at the HK Museum of History or other suitable site.

ANALYSIS AND COLLATION OF DATA

Upon the completion of the field work, all excavated materials would be processed, catalogued, and subjected to expert examination and scientific analysis as necessary. Two prominent ceramic historians, Dr. Ho Chui-mei and Mr Peter Y.K. Lam, have expressed a willingness to analyze pottery from the excavation. Results of all studies conducted in the field and the laboratory would be integrated into a comprehensive history of the island.

INTERIM AND FINAL REPORT

An interim report would be prepared by the end of March 1991. An academic monograph reporting the results of the project would be published in early 1992, and a bilingual summary would be prepared in booklet form for a general readers.

THE PROJECT

The major salvage operation proposed by the Society was accepted by Government in September 1990, and funding of 1.5 million dollars was provided by the Royal Hong Kong Jockey Club. Studies of oral and documentary history had begun in June of that year, along with a review of the previous excavation records from 1979-82 and earlier discoveries on the island. An intensive survey of the entire island was conducted by the director and deputy director from Sept.15 - Oct.15, followed by the initiation of fieldwork with a team of two site assistants, eight workers and volunteers. Staff and principal participants in the project were :

Director -- William Meacham
Deputy Director -- Richard Thomas (Sept-March)
Deputy Director -- Ho Chui-mei (April-June)
Deputy Director -- Cheng Kai-ming (April, June)
Deputy Director -- Hugh Cameron (April-May)
Overseas Adviser -- Richard Shutler (Nov-Dec)

Site Assistant -- Diana Chui
Site Assistant -- Anna Chi (Oct-Ma
Artist -- Stacey Wolf (Jan-June)
Site Assistant -- Robert Esser (June
Workers -- villagers from Lung Kw
Esser (Oct-May)
Volunteers (regular) -- Beverley Hi
Borowski, Geoff Wade, Frank Ip, Karen Do
HKU and CUHK

In addition, many members of the H
on an occasional basis. A 3-month period
October, by W. Meacham, R. Esser, D. Ch

Fieldwork continued through July
summary of the dates of work conducted a

Sept.15 - Oct.14	Survey of the
Oct.15 - Nov.10	Fu Tei Wan t
Nov.13 - 15	Lam Chau
Nov.19 - Jan.14	Fu Tei platea
Dec.11	Rock shelter i

Dec.17	Shu Leung Wan
Jan.15 - Feb.25	Ha Law Wan
Feb.26 - Mar.15	Kwo Lo Wan (upper)
Mar.16 - Apr.4	Kwo Lo Wan (lower)
Apr.10 - May 22	Sham Wan Tsuen sand bar site
May 23 - June 21	Sham Wan Tsuen sand bar site



Figure 1.1 -- Aerial view of Chek Lap Kok with Sham Wan Tsuen in the foreground.



Figure 1.2 -- View of Chek Lap Kok from the sea facing south with Lantau in the background.

Chinese historical documents shed very little light on the inhabitants of the island prior to the 19th century. These documents have been studied by Anthony Siu Kwok-kin, and his report is given below.

CHINESE SOURCES, BY ANTHONY SIU KWOK-KIN

[See also the Chinese version of this report at Appendix 8]

Chek Lap Kok Island lies to the north of the Tung Chung valley of Lantau Island. The island is hilly with very little vegetation cover. It has been inhabited since the Stone Age. In recent times, stone and bronze implements were found on the island.⁽¹⁾ Lime kilns built by the people in the Tang and Yuan dynasties and some Sung coins were found too.⁽²⁾ The kilns were used to produce lime for the repairing of fishing-boats, the building of houses, and making instruments for salt-drying.⁽³⁾

The island was known as Chek Lap Chau since the 16th century, with more people forming a large settlement.⁽⁴⁾ The name may have derived from the appearance of the island. The rocky hill-slopes with little vegetation cover looks like a person with a naked body. People called this "da chek lak" in Cantonese, which means "not wearing any clothes". In the late 18th century, the island was called Chek Lik Kok.⁽⁵⁾ Nowadays, we call it Chek Lap Kok Island.⁽⁶⁾ Some people say the name comes from the fact that the island has the shape of a Red Tripletail (a kind of fish); others say that the water around the coast of the island has a lot of Red Tripletails.

In 1809, the area became a battlefield for the pirates and the Ching navy. The book 'History of the Pirates who infested the China Sea from 1807 to 1810' gave a very detailed record of that incident. It recorded,

"..... In consequence of this determination all commanders and officers of the different vessels were ordered to meet on the seventeenth at Chih Leih Keo (i.e. Chek Lap Kok), to blockade the pirates in Ta Yu Shan, and to cut off all supplies of provisions that might be sent to them. To annoy them yet more, the officers were ordered to prepare the materials for the fire-vessels. These fire-vessels were filled with gunpowder, nitre, and other combustibles; after being filled, they were set on fire by a match from the stern, and were instantly all in a blaze. The Major of Heang Shan, Pang Noo, asked permission to bring soldiers with him, in order that they might go on shore and make an attack under the sound of martial music, during the time the mariners made their preparation. On the twentieth it began to blow very fresh from the north, and the commander ordered twenty fire-vessels to be sent off, when they took driven by the wind, an easterly direction; but the pirates' entrenchments being protected by a mountain, the wind ceased, and they could not move farther on in that direction; they turned about and set on fire two men of war. The pirates knowing our design were well prepared for it; they had bars with very long pincers, by which they took hold of the fire-vessels and kept them off, so that they could not come near. Our commander, however, would not leave the place; and being very eager to fight, he ordered that an attack should be made, and it is presumed that about three hundred pirates were killed. Pao (i.e.

Cheung Pao Tsai) now began to be afraid, and asked the Spirit of the Three Po, or Old Mothers, to give a prognostic. The Puh, or lot for fighting, was disastrous; the Puh, or lot to remain in the easterly entrenchment, was to be happy. The Puh, or lot for knowing if he might force the blockade or not on leaving his station tomorrow, was also happy, three times one after another.

There arose with the day-light on the twenty-second a light southerly breeze; all the squadrons began to move, and the pirates prepared themselves joyfully to leave their station. About noon there was a strong southerly wind, and a very rough sea on. As soon as it became dark the pirates made sail, with a good deal of noise, and broke through the blockade, favoured by the southerly wind. About a hundred vessels were upset, when the pirates left Ta Yu Shan. But our commander being unaware that the pirates would leave their entrenchments, was not prepared to withstand them. The foreign vessels fired their guns and surrounded about ten leaky vessels, but could not hurt the pirates themselves; the pirates left the leaky vessels behind and ran away.⁽⁷⁾

With the surrender of the pirates in 1810, people on the island lived peacefully on intensive farming and quarrying.⁽⁸⁾ The large amount of granite produced on the island favoured the development of granite mining. The products were used to build roads and houses in the city of Hong Kong.

Some fishermen made use of the coastal area for repairing their boats and for drying the fishing nets. Thus, on the north coast of the island, there is a Tin Hau Temple built in 1823.⁽⁹⁾ The temple was built all of granite with money donated by some quarry companies.⁽¹⁰⁾ It is now in good condition.

With the decline of quarrying on the island after the Second World War, many people moved to the city for better employment. Thus, in the 50s of the 20th century, there were about two hundred people living on the island. Nowadays, there are only less than one hundred old people.

In early 1990, the plan for a new airport on the island was proclaimed. People living on the island have to move to other places and the villages have to be abandoned. The temple will be moved to the Tung Chung valley on Lantau Island. Reclamation will join the island with Lantau Island. At that time, Chek Lap Kok Island will cease to exist. It will be part of the new airport then.

NOTES:

1. Stone and bronze implements were found at Kwo Lo Wan.
2. Tang kilns were found at Shan Wan Tsuen and Fu Tei Wan; and Yuan kilns were found at Ha Lo Wan.
3. Tian Gong Kai Wu (1637), pp. 54, 66-68.

4. Yue Da Ji (1573-1620), 32:38.
5. Xinan Gazetteer (1819), 13:11.
6. Hong Kong Streets and Places (1978), Vol. 1, p. 2.
7. History of the Pirates who infested the China Sea from 1807 to 1810 (1831), pp. 60-63. The book was an English translation of a Chinese book, which was written by a person who lived in Xinhui at the time of piracy.
8. They grew fruits and vegetables for home consumption.
9. See the inscription on the Stone Tablet on top of the door, and the inscription on the two incense burners outside the temple.
10. On the Stone Tablet on top of the door of the temple, the names of the two quarry companies can be seen.

WESTERN SOURCES

The first reference to the island in Western sources is a brief mention (referred to as the island of "Shatlapko") in a British naval reconnaissance report by Lt. H.W. Parrish in 1794. Again there is no mention of any inhabitants of the island or any land use by man. The first detailed evidence of human occupation of the island from written sources is the land use survey carried out in 1904-5 by Indian surveyors in the British Army, as part of the general registration of land ownership in the New Territories. This record reveals an elaborate and complicated web of ownership and land use -- clearly the result of decades if not centuries of development. Many of the fields are listed as "waste" and had no current claimant. Eight clans (Tang, Chang, Chow, Fuk, Ho, Li, Tse and Wong) from several villages on the north coast of Lantau had ownership of the land, principally at Sham Wan Tsuen, Cheung Sha Lan and Fu Tei Wan, with smaller cultivation/settlement areas at Kwo Lo Wan, A Ma Wan and the pass south of Sham Wan Tsuen. The genealogies of these clans have not been studied, and may shed light on how they came to own land on Chek Lap Kok.

The main uses of the land were recorded as "padi" and "dry cultivation"; pigsties, huts and threshing floors are also noted. Houses are listed at Sham Wan Tsuen, Cheung Sha Lan, Kwo Lo Wan and A Ma Wan, but not at Fu Tei Wan; the latter however had an "embankment" on the eastern side of the stream near its mouth. It is clear from the recorded land use that an intensive agricultural system had been in place for some time, with rice paddy fields and bunds dominating all the lowlands. It is unclear when this system was first introduced, but the archaeological evidence discussed below strongly suggests that it does not predate 1750 to 1800. The location of the village area at Sham Wan Tsuen, on a low hillslope well back in the valley, mirrors a common settlement preference in the region -- to be on higher ground than the paddies. Obviously this would

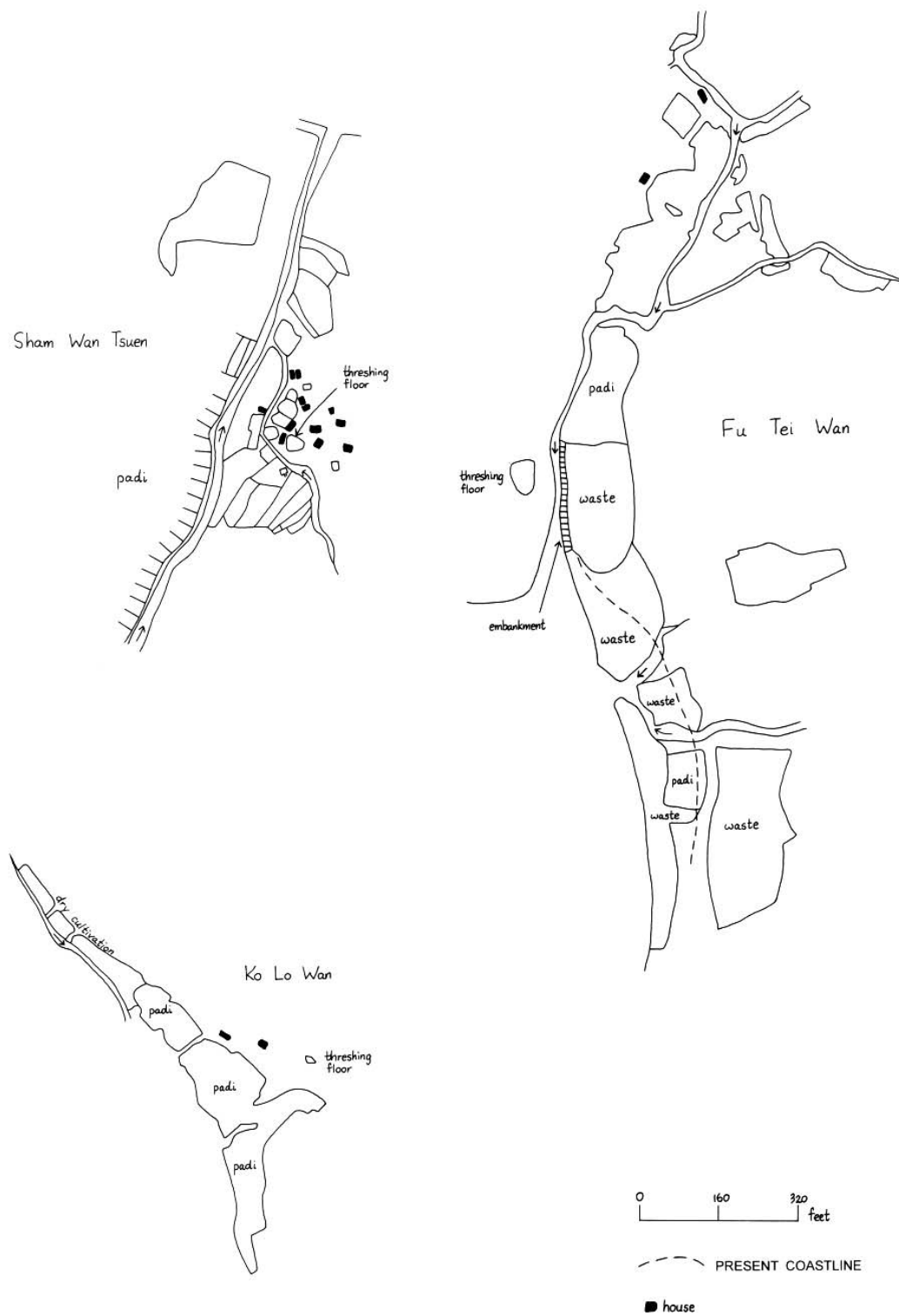


Figure 1.3 -- 1905 land use survey maps.



Figure 1.4 -- Crown Lands and Survey maps of the same areas as in Figure 1.3 in 1963.

be desirable to avoid flooding, and also to provide the maximum amount of land for rice cultivation. Three stone houses (in ruins) and a threshing floor noted in 1905 were located during our survey. An abandoned earth god altar at a large tree was observed nearby, and a local informant recalled that formerly there was a boulder but this had been moved.

The 1905 maps show a band of fields at Fu Tei Wan along what was then the shoreline/beach. This land no longer exists, as the high water mark is now only a few metres from the steep slope of the hill. Previous commentators have doubted the accuracy of the 1905 survey, but a careful study reveals that it is quite accurate. The stream systems then recorded at Fu Tei Wan, Kwo Lo Wan and Sham Wan Tsuen almost exactly match those of today, as do the distances from obvious points (e.g. the south end of the beach at Fu Tei Wan to the north end of the Kwo Lo Wan beach). Overlaying 1905 and 1963 maps produces good agreement in each of the areas except Fu Tei Wan. It is reasonable to conclude that major erosion of the fields fringing the beach at Fu Tei Wan has taken place since 1905. Schofield mentions the activities of sand diggers at Ha Law Wan, and at many other sites in the islands; removal of sand coupled with the abandonment of the fields after cultivation may well have set in motion a process of marine erosion which by 1945 (the first available aerial photograph) had pushed the beach back to areas previously occupied by the fields. It was almost certainly this process which exposed the lime kiln at Fu Tei Wan, and undoubtedly destroyed others adjacent to it.

Subsequent land records reveal few changes since the registration in 1905. Ho Yung Sau, owner of plot 249 which is the main kiln site at Sham Wan Tsuen, acquired a further 20 acres in 1909. His son, Ho Yung Hei, was the only inhabitant of the island to be granted "indigenous villager" status (continuous residency and direct inheritance of land from father to son) during the recent clearance of the island. This status was not recognized in the only major study of Chek Lap Kok villagers; in a 1972 dissertation, Ching Cheong stated that "there is no family on Chek Lap Kok nowadays with a native ancestor" [pre-dating 1911]. In another transaction in 1909, Li Pik applied for a lease on 38 acres at Cheung Sha Lan and stated he was "a quarry man too poor to buy but willing to pay Crown Rent" (2937/1909). In the same document, Lau I stated "he is too poor even to pay Crown Rent and the land does not pay".

The stone quarry at the northern end of the island certainly dates back to the 19th century, but evidence is largely deductive. It was a thriving concern in 1909, and it has been suggested that the Tin Hau temple was built by the quarry enterprise. Its solid granite construction and its inscription lend credence to the notion. Richard Langford has documented extensive quarrying scars and quarry shingle beaches all along the north shore of the island, from Fui Yiu Ha around to Cheung Sha Lan. In 1912, the Colonial Secretary G.N. Orme stated in his "Report on the New Territories 1898-1911":

...stone quarries, one on Chek Lap Kok and the other near Lung Ku Tan...These sell their stone to Canton and the West River, mostly for paving stones. The quarry men are nearly all Hakkas from Kweishin, who settle at the quarries until they have made some money and then return home.

This was clearly a major industry, but unfortunately very little is known of its early operations and history. It was still producing quartz in the 1950's, according to the Annual Dept. Report of the Bureau of Mines (Davis 1962). Apart from a few examples noted in early 20th century land records, the quarry workers did not attempt to settle on the island, as Orme remarked.

ORAL HISTORY

The 20th century occupation of Chek Lap Kok has been studied in the unpublished dissertation mentioned above by Ching Cheong (HKU, 1972). During the course of our work we were able to substantiate or correct some of the information he presented; other work was done by a group of geography students from the University of Hong Kong under the supervision of Dr. Richard Irving.

Ching divides the 20th century occupants into four groups:

1. "natives" who lived on the island before 1911. "There is no family in Chek Lap Kok nowadays with a native ancestor" but as noted above Ho Yung Hei at least is descended from a "native".
2. "locals" who colonized the island in the period 1911-1949. "There are three families in Chek Lap Kok with a 'local' ancestor."
3. "early migrants" who came in the period 1950-1960. "There are now [ie 1972] 10 'early migrant' families in Chek Lap Kok."
4. "recent migrants" who came from 1961 to 1972. "There are 19 such families on the island."

Ching states that little is known of the natives, and generally attributes to them the construction of the padi field system, the operation of the quarry, and the building of the Tin Hau temple. Only the first of these accomplishments can be said to have been certainly done by the "natives"; the quarry and the temple may have been the work of outsiders who did not live on Chek Lap Kok initially.

Ching's research on the locals seems to be on firmer ground, although there are errors, such as with the Ho clan. "Before 1950, the whole island was cultivated by four families, and padi was the main crop" augmented by pigs and chickens. Two families were living at Sham Wan Tsuen, one at Kwo Lo Wan and one at Fu Tei Wan, but the inhabitants of Kwo Lo Wan and Fu Tei Wan "left the island in 1950-60, and their padi lands were taken over by the 'early migrants'." There is some doubt about this statement, since the Li's were occupying Fu Tei Wan before the first four families settled there as part of the Baptist program in 1956, and the 75-year-old widow of one of the Li's, Madame Chow Fa, was still living there in 1990. There are conflicting reports on whether the Li's were living at Fu Tei Wan before World War II.

The inhabitants of Chek Lap Kok after 1911 "came from Tung Chung, Sha Lo Wan, and Sha Tau" on Lantau. They maintained and expanded the padi fields bequeathed by the "natives". The only two families living at Sham Wan Tsuen after the war were

from the Yau and Ho clans according to Madame Fung For-mui, who married into the Yau clan in 1946. The migration into Chek Lap Kok in the 1950's and 1960's was spurred by the flood of refugees from China, and by the settlement programme of the HK Christian Welfare Relief Council which pioneered the development of Fu Tei Wan and Ha Law Wan. The peak of this programme was reached in the late 1960's, when the island's population was probably at an all time high, and most the low-lying land had intensive rice cultivation. Thereafter, for a number of reasons common with other parts of HK, the settlements began to fade, padi fields were abandoned (1968-72), the young people moved into the city, the church at Fu Tei Wan and youth camp at Ha Law Wan ceased to function (around 1976), and many homesteads were abandoned. But agricultural activities, mainly the raising of pigs and chickens, continued right up to a few weeks before the clearance date for the beginning of the airport construction (April 1, 1990).

During the fieldwork, we were fortunate to establish very friendly relations with the villagers of Fu Tei Wan and later Kwo Lo Wan, initially through the introduction of Mr. Ho Yan-ning, who discovered a Six Dynasties/Tang glazed jar and the lime kiln at Fu Tei Wan (see chapter 2 below). Mr. Ho personally assisted the settlers at Fu Tei Wan in the 1950's. Although now well past 70 and walking with difficulty, he accompanied us to the island to point out the spot where he found the glazed jar and to help us make arrangements for accommodation. From the villagers we learned hundreds of anecdotes about life on the island, especially its hardships, snakes, wasps, mosquitoes, poor soil and feuding. We also had first-hand experiences of some of these. An article with many of



Figure 1.5 -- Mr. Ho Yan-ning and the project director talking with villagers at Fu Tei Wan.

these anecdotes and other episodes which marked the 9-month field project on the island was compiled by Robert Esser, included at Appendix 3.

One of the constantly recurring topics in all interviews was the problem of water, especially at the southern end, but often affecting Sham Wan Tsuen as well. There were frequent dispute among villagers over water rights, and many of the settlers who came in the 1950' eventually left the island because of the lack of water for crops and livestock. The year 1990-91 was one of the driest this century, and water levels in the wells and small streams were, according to several Fu Tei Wan villagers, at an all-time low, although they also attributed this fact to deep drilling in preparation for the airport construction. For one two-week period in June, before the rains and frogs came with gusto, water supplies at both Sham Wan Tsuen and Fu Tei Wan had almost dried up, and were only available in the morning before the pumps had exhausted the well supply. Undoubtedly this uncertain supply was a major factor in life on the island in earlier times, perhaps sometimes with disastrous results.

A study of the place names on the island yielded little hard data, but some interesting possibilities. A nickname of the island is "dei mei" ("land's end", or more figuratively "the end of the line"), a place where people only went out of desperation, poverty or lack of anything better. The village headman Wong Yiu-nam put a different twist on the expression, explaining it roughly as "a place to get away from it all". A rock formation known locally as "the battery" excited some interest when Mr. Wong remarked that there really were fortifications on top of the hill south of Kwo Lo Wan, not where "the battery" is. A search of the area revealed some wartime trenches, foxholes and other recent features. The bay known as Fui Yiu Wan ("Lime Kiln Bay") due east of Sham Wan Tsuen suggests the presence of a lime kiln in Ching times at least, but no such structure could be located, nor did any villager know whether there had ever been a lime kiln in the area.

PREVIOUS ARCHAEOLOGICAL DISCOVERIES

The first archaeologist to examine sites on the island was Walter Schofield, whose notebooks record that he visited Chek Lap Kok on at least four occasions in 1923, 1925, 1931 and 1933. The first two visits were several years before Schofield began to take an interest in archaeology, but he records the presence of a stone net sinker and jars "probably burial urns" at Fu Tei Wan, but makes no mention of the lime kiln there. His second and third visits were specifically archaeological in purpose. Notes on these two visits are given below.

SCHOFIELD'S NOTES

[Entry in Schofield's notebook dated 14-1-31]

Ch'ik Lap Kok. S. end of island is a stretch of low land between 2 bays; this low land, except a small valley on E., has always been waste. It connects the main mass of the

island to N. with the isolated rocky hill to S.

The bay on W. side has at one time clearly been a cemetery. Kam t'ap in situ are rare, tho' 1 was found, the pottery much decayed and reddened. But fragments of them and other articles are abundant. Great numbers of them are embedded in the coarse gravelly earth, of decayed granite, which everywhere forms the soil. This has been cut into gullies, or dug away by sand diggers, and its contents revealed.

In the deepest gully is a bed of large stones resembling either an old boulder-strewn land surface or the upper part of a beach. Over it lies 1 to 6 ft. of earth, with here and there a little blown sand near beach. It lies just at extreme high tide mark now. No relics were found in it.

Several of the pieces of pottery enumerated had coarse gravel encrusted in their handles and elsewhere, pointing to accumulation of earth since they were put into the cemetery.

The articles found fall into two classes: I. articles of common use; II. funerary articles; III. prehistoric relics. III being smallest is taken first:

III. small adze of stone, straight on one side, irregular on the other. Edge bevelled on one side and curved slightly; ends rounded. Only 1 side, the bevelled one, is smoothed and that roughly. It is waterworn and subangular, and was found lying on beach between tide marks. Rock possibly an ash, but v. uncertain.

I. (1) rice bowl ? pale yellow earthenware, stand and base outside unglazed, inside and rest of outside a crackled yellowish green glaze. Sides rounded in section, not str. like modern rice bowls.

(2) part of a tea urn, showing a small handle and the lip. Grey pottery, light brown crackled glaze, worn or absent on lip and handle.

(3) piece of pot, dark red earthenware mixed with grey patches, wheel marks inside, blackened outside, perhaps by fire.

(4) flint, probably used for striking lights. Too large for flint-lock gun ?

(5) candlesticks, prob. modern, of earthenware.

II. (1) lip of coarse red earthenware pot, stated by Ho Fo Yip to be used as a cover for an urn (doubtful); prob. of modern type.

(2) (3) (4) 3 pieces of funerary urns (kam tap) with small handles, greyish black unglazed earthenware, with sets of concentric grooves outside (2 or 3 per set) and wheelmarks inside. Stated to be Hakka pattern and old-fashioned; they were on sale in Shumchun 30 yrs ago.

(5) waterworn piece of urn, lines deep, 1/2 inch apart, black glaze, no handle.

(6) piece of urn, handle broken off, streaky grey slip, black colouring outside and in, whole outside covered with small grooves about 30 to the inch.

(7) 4 fragments decaying earthenware from only urn in situ. Red ware.

(8) urn fragment ? with sets of 4 and 6 grooves outside, wheelmarks inside.

3 unclassified pieces.

[Entry in Schofield's notebook dated 25-3-33]

Ch'ik Lap Kok. Kwo Lo Wan, W. beach

S end, layer of bones and shells in black sandy humus at 8"; well glazed pottery as well.

Section in gully :

soil 6"

sandy rainwash 22"

Here 1 sp. found.

sandy rainwash 17"

stones, 1r., w. coarse rainwash of decayed granite, some boulders 2'+

Photos :

1. washout
2. N. end of beach, 114.
3. section in gully at back of beach.
4. part of beach S. of gully
5. isthmus from S. hill, looking NW.

Bay to N. has coarse pottery on beach similar to some of that at Kwo Lo Wan, but none seen in situ. V. Little sand now left; no Han or really early pottery anywhere. Plateau above beach also has much medieval to modern pottery. All pottery from N. end of beach was in rainwash from a fairly steep slope; hence fairly modern pottery was found at 11" and 13".

DISCUSSION OF PREVIOUS ARCHAEOLOGICAL WORK

Schofield's 1931 visit is clearly to Ha Law Wan, although the place is not named. The deep gully with bed of large stones can still be seen today, although no trace remains of the cemetery urns he mentions. The pottery he found seems from his description to be mostly Ching, but one piece of "crackled yellowish green glaze" is interesting, and probably earlier. He did not see any of the kilns up the gully, probably because they were completely buried. Schofield did note many lime kilns at other sites, and would surely have taken an interest in the structures had they been visible. He discovered one adze but no prehistoric pottery at all, a situation similar to our own extensive work on the site.

In 1933 he visited Kwo Lo Wan, and it is quite remarkable that he found no prehistoric pottery at all, considering the massive prehistoric deposits that were lurking beneath the surface. These were probably also well preserved in the soil, and had not yet

been cut by the agricultural activities which revealed the Middle Neolithic material in the 1980's. Again, similar circumstances prevailed in 1991 when we investigated the site. Although there was an important Bronze Age site just behind the beach, no piece of Bronze Age pottery was found in that area, despite recent terracing and some erosion.

By the late 1930's, Schofield and C.M. Heanley had compiled a map of archaeological sites in the territory. No copies of this map have survived, but according to Mary Tregear it was being used in 1961 to make an updated archaeological map of HK. A draft of that map has four sites, numbered 60, 61, 62 and 114, on Chek Lap Kok with the notation that these are Schofield's numbers. His 1933 note labels Kwo Lo Wan as 114 and this corresponds to the 1961 map; 60 and 62 appear to be Fu Tei Wan and Sham Wan Tsuen respectively, although they are located further back from the coast than those sites should be. Number 61 is a mystery; it may be Ha Law Wan or a small bay north of Kwo Lo Wan. In any event there is no other information about any of these sites.

The next known archaeological work on the island took place in 1957 when S.M. Bard and R.B. Maneely visited several sites there as part of a general territory survey by the University Archaeological Team. They reported stone tools from 114, and geometric pottery and a stone axe from two other sites; these were unnamed but military grid co-ordinates were given. These co-ordinates however are locations in the hills west of Sham Wan Tsuen and do not correspond to the descriptions of the find spots. Apparently these sites are Fu Tei Wan and Sham Wan Tsuen. In 1961 the Team conducted a one-day excavation at Sham Wan Tsuen with three trenches dug, discovering a kiln and layers of "mixed finds". In the note of this activity there is mention of "the old trench," perhaps indicating some previous work on the site. There is also a brief mention of "Southwest, Fu To Wan - mixed finds - Six Dynasties and rough pottery."

In an article published in 1961 Bard wrote:

...The north part of Chek Lap Kok island has a sandspit, rising like a mound behind another 'old lagoon'; an exquisite bronze arrowhead, triangular in cross-section, was unearthed there in 1960. However in recent conversation Bard informed us that the point in question was polished stone, not bronze.

In 1960, Ho Yan-ning discovered a glazed Six Dynasties' jar at Fu Tei Wan, and donated it to the Fung Ping Shan Museum at HKU. This discovery was reported in the newspapers and a clipping was put into the Team's files. Years later, in 1979, this writer contacted Mr. Ho and he described the find spot and also a kiln he had seen nearby.

The 1970's witnessed an increase in archaeological investigations. I first visited the island in 1972, and excavated one small test pit at Sham Wan Tsuen; only kiln debris was found, which was not recognized at the time to be Tang in age. Research into the lime kiln question was prompted by Hugh Cameron in 1976-77, and when the possibility of building an airport on Chek Lap Kok was first raised in 1978, attention turned to Sham



Figure 1.6 -- The kiln at Fu Tei Wan as discovered in 1980; see also chapter 2, Figures 2.14 to 2.17.

Wan Tsuen. A major excavation was conducted there by the HKAS over four seasons from 1979 to 1984. This work has been fully reported (Cameron and Williams 1984). A brief note on the excavation of the Fu Tei Wan kiln interior was also published (Cameron 1984). Kwo Lo Wan was visited from time to time, and surface material collected, but it was not studied or excavated.

In 1982, a three-year "territory-wide archaeological survey" was commissioned by the Government. In spite of the island being discussed as a possible site for the new airport, the consultants made only two day visits to the island, and compiled a file on each site. They made no new discoveries or contributions to research, but severely and wrongly criticized the previous excavations at Sham Wan Tsuen.

In sum, prior to the beginning of the salvage project in 1990, the Sham Wan Tsuen sandbar site had been investigated in some detail, the kiln at Fu Tei Wan had been recorded and dated, and surface finds had been made at Kwo Lo Wan but not systematically studied. Evidence for a prehistoric occupation of Chek Lap Kok was confined to the materials found out of context at Sham Wan Tsuen and Kwo Lo Wan, and only the former could be dated -- to the Late Neolithic. There was no evidence of Middle Neolithic or Bronze Age, nor of Han, Sung or Ming occupation. The large valley at Sham Wan Tsuen offered potential, as did the plateaux at Fu Tei Wan and Ha Law Wan, and the lower hillslope at Kwo Lo Wan.

SURVEY

The physical setting has been studied in some detail by Langford (1993) geologically; studies were carried out in 1991-92 on the fauna and flora. Geographers have attributed the colonization of the island to population pressure and agricultural expansion from north Lantau, where farming communities seem to have been established earlier in the late historical (Ming and Ching) eras.

There are several sandy beaches on the island, and valleys with arable land at Sham Wan Tsuen, Fu Tei Wan, Kwo Lo Wan and Cheung Sha Lan. All of these landforms were considered as potential archaeological sites. The main feature of the island is the north-south fault that has created the large valleys at Sham Wan Tsuen and Fu Tei Wan, and it is in these valleys that the rice cultivation has taken place. Crown Land Survey maps of 1963 show graves on steep hillslopes, many quite far removed from the settled areas. Finally the coastline is mostly of exposed granite with frequent dykes of finer volcanic rock quite suitable for rock carvings, though none had been reported from the island nor from the north coast of Lantau.

The objectives of the survey were simple: to discover any archaeological sites the island possessed, and to assess those already known. In addition to studying the previous archaeological discoveries on the island, a careful examination of 1:1200 maps was carried out, and topographic features of possible interest were marked for surface inspection. Aerial photographs were also used; the earliest available photo of reasonable clarity is from 1945, and it shows Fu Tei Wan and Ha Law Wan before the significant terracing and aforestation of the 1950's. The most striking feature is the 12-15m plateau that runs parallel to the beach and valley at Fu Tei Wan and forms the isthmus at Ha Law Wan. This landform should have been particularly attractive to man in all periods, as it is easily accessible from the beach and sheltered from northerly winter monsoon winds.

RESULTS OF THE SURVEY

The first phase of the survey concentrated on the northern end of the island, and attention was focused on each small bay/beach, Sham Wan Tsuen, Cheung Sha Lan and Shu Leung Wan, in a three-pronged attack : the back beach and valley, the surrounding hills, and the coastline. Generally, the results were disappointing, no new sites were found, and one of the most promising areas (Cheung Sha Lan) yielded no material at all, in spite of several hours of surface inspection, augering, and the existence of major stream cutting and terraces under active cultivation. Fui Yiu Wan, Lam Wan and A Ma Wan all seemed potential sites for occupation, but no evidence was found. Only at Shu Leung Wan was prehistoric material found, although somewhat sparse, in an augerhole at one location above the beach. A Ching grave unknown to the villagers was also found near the summit of the hill separating Shu Leung Wan and Sham Wan Tsuen.

The major data to come from the survey of the northern end of Chek Lap Kok was

the identification of potential deposit areas around the eastern rim of the Sham Wan Tsuen valley. Augering revealed Tang kiln deposits at 0.5 to 1m below surface at elevations of between 5 and 6.5 mPD. It had long been considered that while the sand bar may have been the main industrial area for the lime operation, the support areas and habitations were probably located on flat and higher ground nearby. The possibility of in situ prehistoric materials was also noted, as some coarse sherds were found in the augering and the elevations were appropriate for Neolithic occupation. It was evident therefore that time would have to be reserved for adequate testing of this area, after the complete excavation of the sand bar site.

Before proceeding to the main sites on the southern end, a complete coastline survey was conducted on foot. A number of dykes of fine grained grey or black volcanic rock was observed. Vegetation was frequently heavy, and visibility was extremely low, but the dyke rocks were examined thoroughly. No rock carvings were found, and the quality of the dyke rock was generally very weathered, thus poor as a resource for stone tools. Three small shrines were observed, with signs of recent use. It is unclear whether the shrines are dedicated to a local earth god or a water spirit.

Several small unnamed beaches were examined, but none of them yielded any prehistoric or early historical material, nor did any of the back beach areas appear to hold potential for archaeological deposits.

Fu Tei Wan valley was systematically surveyed by sector, and in spite of heavy vegetation surface materials were found in two areas on the plateau. The prehistoric pottery was determined to be exclusively Middle Neolithic, whereas surface materials from the back beach areas included Middle Neolithic and Late Neolithic types, as well as Tang and Sung wares. It was clear that major excavations would be required on both the plateau and back beach areas.

Ha Law Wan yielded only sparse Tang and Sung pottery, in spite of high visibility from active terraces and exposures. The most important discovery was the wall of a fired clay, kiln-like structure (FC2) in a terrace wall. This structure was unlike the usual Tang lime kilns in two respects: its location well above and distant from the beach, and its shape. The total absence of characteristic kiln debris and firebars always associated with the Tang kilns was another indication that the structure was unusual. Another area of apparently fired clay (FC1) was noted just below the concrete footpath, but it was unclear whether this was another kiln structure or material laid down on the construction of the path. These structures were noted for excavation, and in spite of the lack of surface finds a series of test pits was desirable at the site owing to its apparent attractiveness and good water supply.

Kwo Lo Wan was closely examined, and the pottery collected was like Fu Tei Wan plateau entirely Middle Neolithic. There seemed to be less deposit there, however, as decomposed granite (DG) was outcropping at several points. An unusual fired clay structure (FC1) was observed in the midst of the Middle Neolithic deposit, and the possibility could not be excluded that this was an Middle Neolithic structure. Again, a major excavation would be required to clarify the structure and the use of the site. As

mentioned above, in spite of careful surface search in the back beach areas, which were terraced and eroding in the first step up from the beach, no prehistoric material was found. No tests were planned for that area, and its important Bronze Age deposit would not have come to light but for the existence of a small fragment of another fired clay structure nearby, cut into DG.

Conversations with villagers provided the information that a natural "stone house" or rock shelter was located high in the hills above Fu Tei. It was said that the floor was earth and rain did not enter the covered area. After some difficulty this rock shelter was found, and loose on the floor were fragments of coarse plain pottery of Neolithic type. As no prehistoric rock shelter site had ever been discovered in Hong Kong, further investigation was required. Finally, the hill south of Ha Law Wan was searched again after a major hill fire cleared its vegetation, and more graves were discovered, some with dateable inscriptions (19th century) and others of similar style without inscriptions. Intensive search revealed no trace of a Ching battery corresponding to the known battery across the strait on Lantau.

At the conclusion of the survey in early October 1990, the tasks for the major 9-month fieldwork operation were clear. Sites with deposits to be tested and maximum data extracted were:

1. the plateau and back beach at Fu Tei Wan
2. the site at Ha Law Wan
3. the site at Kwo Lo Wan
4. the rock shelter
5. the site at Shu Leung Wan
6. the sand bar site at Sham Wan Tsuen
7. the eastern valley rim at Sham Wan Tsuen

Of these goals, 1,3 and 6 were thought to require the largest blocks of time, and two months were tentatively set aside for each. 4 and 5 were judged to require at most only a few days; the major problem in estimating time requirements was presented by 2 and 7, and one month was tentatively allocated, with one extra month free to be used as the operation developed. Considerable re-shaping of the schedule proved necessary.

GRAVES

Sixteen graves were examined during the survey, and the earliest inscription recorded was a renovation date of Tao Kuang (1822); most were late 19th century. Two graves of an unnamed "*chin chiu lo yen*" ("old man from a previous era") were noted, but it now seems clear that the characters *chin chiu* indicate an earlier time or "previous reign" rather than "previous dynasty". Many inscriptions were illegible, but the style of the graves and especially the burial jars enabled a 19th/20th century dating to be estimated. Monitoring of the clearance of graves by the Regional Services Dept. showed that of the 20 graves which they removed, all had typical late burial jars. Two graves were excavated by our team, one in the hills above Shu Leung Wan totally obscured by vegetation and another at the back of Fu Tei Wan valley nestled underneath a large pine tree; neither had legible dates, but both contained similar burial jars of probable 19th century type.