cults among the Nakanai and their relation to native religious ideas and values is, therefore, Mr. Valentine's special problem of study. He has the possibility of making an important contribution to our understanding of phenomena of this type.

My own work was largely concentrated on the more formal aspects of social and ceremonial organization, with respect to which the Nakanai presented some interesting problems. Together, Miss Chowning and I collected the materials for a brief grammar and dictionary of the language. We also managed to get some additional materials for the University Museum's Melanesian collections.

It is a truism that one always comes home from the field wishing one had more time, seeing all the holes in one's data. All of us have this feeling, yet, considering our objectives and the time at our disposal and considering all the obstacles which we might have encountered, I cannot help but feel that the expedition has been a successful one. I am deeply grateful to everyone connected with it for helping to make it so.

Ward H. Goodenough

## THE ARCTIC EXPEDITION

In the middle of May of this year the Arctic Expedition sponsored jointly by the University Museum and the Danish National Museum set out for Churchill in the northeastern corner of Canada's Manitoba. Originally the personnel was limited to Jorgen Meldgaard of the Danish National Museum and myself representing the University Museum. Once in Churchiil, Rev. Guy Marie-Rousellier, a missionary priest who is greatly interested in Arctic archaeology, joined us. This was only after a sudden change in our original plans, however, for we had intended to proceed from Churchili to Baker Lake in the heart of the Catibou Eskimo country, but we discovered that a plane was leaving within a few days for Igloolik, over 300 miles north of the Arctic Circle in the Northwest Territories. Since ordinarily this is one of the most inaccessible spots in the Canadian Arctic and promised to be interesting both from an archaeological and ethnological point of view, we relt that it was an opportunity we could not afford to miss. Father Marie Rousellier had served in the mission at Igloclik a number of years before so was most eager to accompany and aid us.

The first month at Igloolik found the land still well frozen in. The Eskimos said it was Spring and many families had already moved from slowly sagging igloos into their summer skin tents. We found it difficult to sense Spring in the air, however, when the ground was still thickly covered with snow, the sea frozen solid, and blizzards with near zero temperature plagued us.

Finally a few gravel ridges and wisps of reindeer moss began to emerge from the snow and it was possible to do a little archaeological reconnaissance. For a week we made almost daily trips by dogsled to points around Igloolik where houses of the Thule Eskimos, who preceded the present people, had been reported. We were looking for evidences of the even earlier Dorset culture, however, and sure enough we found it—on an island called Alarnerk on the northeastern

tip of Melville peninsula, 18 miles south of Igloolik.

Previously the Dorset culture was thought to have been a relatively short-lived, transient culture overshadowed by the later Thules, but the result of our work there indicates that it probably dominated a great part of the eastern Arctic much longer than the Thule.

At Alarnerk we located and mapped an entire Dorset community of 208 houses and later in the season a reconnaissance trip by whaleboat around the northwestern part of Foxe Basin resulted in the discovery of about 150 more Dorset houses at a number of sites in different parts of the area. On the same trip the first evidence of the even older Sarqaq culture came to light. Sarqaq had first been identified in Greenland by Meldgaard.

The Dorset houses were found in terraced rows along the shore of Foxe Basin. The largest site, at Alarnerk, stretched in a band of parallel rows of houses, each located on a raised gravel beach which indicated a change in sea level. When the earliest row of houses was built the sea level must have been approximately 80 feet higher than it is today. The most recently occupied houses were found on an old beach only 24 feet above the one on which the present Eskimos have a summer campsite.

It has been estimated that it has taken about 2,000 years for the sea level to fall 56 feet. If this is an accurate estimate, then we are justified in assigning 2,000 years to the length of occupancy of this Dorset community.

The houses, of course, were gone, and only gravel-filled, moss-covered rectangular depressions marked their sites. Some of them were as large as 20 by 45 feet and from one such house we have over 500 artifacts, tools, weapons, and artwork of flint, slate and ivory. These were the first Dorset houses ever to be positively identified and only at the most recent level of Dorset occupation did the artifacts show any mixture with Thule.

We were fortunate to be able to find enough organic material to eventually provide some dates through Carbon 14 analysis. These organic remnants, along with nearly 3,000 artifacts, several hundred pounds of animal bones, and some human skeleral material from the mound-like Dorset graves would seem to be reward enough for a short season's work in the Arctic, but equally rewarding was the chance to be for a time with some of the most delightful people in the world—the Eskimos. The Iglootingmiuts, who live in the area in which we worked, are particularly wonderful folks and met us at every turn with hospitality, friendship and ever-smiling faces.

Richard Emerick

## EXCAVATIONS IN EL SALVADOR

Although originally planned to include at least some hasty reconnaissance, this past four month season was devoted entirely to excavations around Chalchuapa, a town close to the Guatemala border. The site of El Trapiche, mentioned in an earlier BULLETIN article, was investigated as thoroughly as was possible in the time available. Towards the end of May a second site was dug very briefly on the shore of a local lake. Among the reasons for the Museum's interest in the country was the long obscure nature and affiliations of the Pre-Classic horizon. While Salvadoran and other collections amply evidence Pre-

Classic occupation of the area, something more substantial than incidental discoveries was needed to clarify this early, extended, and complex development. The season fortunately was not without guideposts, the adjacent Guatemala highlands having yielded a long Pre-Classic sequence, largely through the work of the Carnegie Institution of Washington. Also a number of good reports exist on sites of this horizon to the north in Honduras.

The first mound to be excavated in the group of eight at Ei Trapiche had been badiy disturbed in recent years but enough remained for a starter. The disturbed face was cleared, revealing a series of adobe and earth construction levels cuiminating in a number of adobe floors. In an effort to locate something of the extenor, a trench was dug against the opposite undisturbed side. Eventually this was continued through the mound, producing nothing, however, in the way of facing or a stairway. The mound was then in part taken down level by level. No graves were encountered in this work either, but this paucity was compensated by tremendous quantities of sherds, clay figurine fragments, and bits of obsidian, all forming part of the mound's fall. In brief it can be said that the mound originally had the form of a rectangular (or oval?) well-elevated platform with an adobe (puddled rather than blocks) exterior and a hearting of packed earth, with its upper adobe surface having been renewed at various intervais.

The second mound investigated proved more valuable from the standpoint of architecture. Again a trench was begun well out from the mound, carried down to a sterile deposit (blue clay) and then extended into the mound in seatch of something to otient the digging. The mound was found to be basically composed of earth mich in attifacts, but tacking in anything of a definite constructional nature. Again there were no butials. Eventually we reached the center of the mound with a trench already 18 meters long and 5 meters deep. At that point in digging what was to be the final section of the trench we came across a scarum of boulders beneath which was a thin clay line set vertically in the dirt fill. A month was spent following his line which developed into an extraordinary elongated (16 meters) network of clay channels and other interconnected dray constructions. The structure was found to be displaced along the west side of the mound the whole lying in earth, below the boulder layer, which in turn partly supported a mass of seemingly formless puddled adobe. Beyond noting that no obvious clue to its function appeared, further remarks here would only be confusing without plans and photographs.

Other work at the site involved various test pits on and around the other mounds as well as extensive surface collecting. One large stratigraphic pit disclosed two natural ash deposits between which was sandwiched a thick layer of sherd-packed earth. Below the lowest ash fail (the general region remains actively volcanic) no artifacts whatsoever were found. At nearby Tazumai, a monumental site excavated by the Salvadoran government, the upper ash layer is associated with Late Classic material. However, El Trapiche surely ceased to be ceremonially active at a very much earlier time than this.

While the two El Trapiche mounds hardly agree architecturally, the artifacts found in them indicate contemporaneity. In fact, the site at no point showed any cultural disconformity. The pottery and figurines clearly affiliate with the Guatemala highland area and further appear to date the site to the earlier portion of the late Pre-Classic period. Recent Carbon 14 dates for Guatemala suggest an early 1st millennium B.C. date for this occupation.

A sample of some 30,000 sherds was selected for study. The collection further includes a large quantity of clay figurine fragments—not a single complete specimen was found! A number of these figurines had movable limbs. Among the thousands of pieces of obsidian encountered, remarkably few could be classed as artifacts. Other objects found included many metates and manos, also bark beaters, clay ear ornaments and beads cylindrical and flat stamps, and a few unimpressive jade beads. Two carbonized corncoks, both very small, more or less complete the list.

As the collections have not as yet arrived and thus no study has been possible I hesitate to say much about the second site, located on the north shore of a lake just east of the town of Chalchuapa. A series of sand, ash, boulder, and rubble strata contained many large sherds as well as figurine fragments. Only a small portion of the deposit was excavated. While much of the pottery seemed to affiliate with El Trapiche, there also seemed to be a number of striking differences. Among the sherds were many that had been specially cut, usually in a triangular pattern, and these were frequently found to be soot-covered.

The season's work produced nothing spectacular. However, eventual analysis of the material and data should provide a basis for appreciating a fair portion of the Pre-Classic of El Salvado: as well as orienting any possible work there in the future. And if El Salvador wasn't enough, one could contemplate digging very profitably all the way to Panama.

William R. Coe

## 1954 ARCHAEOLOGICAL EXPEDITION INTO NORTHWESTERN CHIHUAHUA — A PRELIMINARY REPORT

The Department of Anthropology of the University of Pennsylvania and the University Museum sponsored an archaeological expedition into northwestern Chihuahua, Mexico during the summer of 1954. This expedition proposed to locate map and test early historic sites in northwestern Chihuahua as a step toward the definition of the early historic and late prehistoric cultures of that area.

Historic sites were chosen for investigation because of the numerous historical documents that could be utilized in the interpretation of archaeological remains, thus making possible a more nearly complete reconstruction of the investigated cultures. Also, a thorough knowledge f the cultures of an area in early historic times would be very useful in the synthesis of earlier cultures as revealed by archaeological excavation.

Before going into the field published histories were examined in an attempt to learn the general location of as many sites as possible. From these sources it was learned that missions were established before 1680 in three Indian villages in northwestern Chihuahua—Casas Grandes, Janos and Cairetas. In 1684 these missions were partially or completely destroyed when the Sumas and Janos Indians of the area joined the Mansos of the El Paso district in a revolt aimed at destroying the Spanish refugees from the New Mexico revolt who were then settled around El Paso. As a result of the revolt the Cairetas and Janos missions were completely abandoned, although a garnson of soldiers was moved to the latter site soon afterwards and remained there until 1857. The Casas Grandes mission survived the revolt, becoming a place of refuge for the Spanish settlers in the area.