SITE Bc-51

INTRODUCTION

This report is based on material recovered incidental to the stabilization of the site. The principal excavation of Bc-51 was undertaken by the University of New Mexico during the Field Session in the summer of 1937. This work is reported in "The preliminary Report on the 1937 Excavations, Bc50, 51, Chaco Canyon, New Mexico," Edited by Kluckhohn and Reiter. University of New Mexico Bulletin, Anthropological Series, Vol. 3, No. 2, 1939. Prior to the 1937 work, and at the close of this session, structures adjacent to and below the level of Bc-51 were also excavated, in part by personnel not attached to the Field Session and these are either unreported or only partially treated in the report. Further, the 1938 and subsequent field schools also carried on unreported work at this site. Thus while the work directed by Kluckhohn is admirably and minutely presented we found upon beginning the stabilization of the site that there were numerous rooms and walls which did not appear on the published plans of the ruin.

Stabilization of the ruin began in the fall of 1949 and intermittently, was held in abeyance during the winter months, and work completed in the spring and early summer of 1950. The writer was assisted during the first period by Raymond Rixey and later by Leland Abel.

Since this is a brief work on an already reported site it presupposes that the reader is familiar with both the publication edited by Kluckhohn and Reiter and also the report on nearby and similar Bc-50 by Brand, Hawley and Hibben (Tseh S., "Small House Ruin, 1937") and material presented in these reports will not be repeated except where necessary for comparison.
II  PIT HOUSE A

Brief notes on this structure were incorporated in the Three-C excavation St. ((Vivian, 1949 p71-72)) Since some additional work, which was written while the pit house was being cleared. Since some additional work was done after that report, the data is summarized here. The structure was disclosed in backfilling trenches and providing surface drainage on the west side of Bo-51. To all appearances it had been cut by the 1938 trenching but had not been fully excavated.

PLAN: A roughly oval central room 13 x 16 feet with attached bins of the same construction and at the same depth on all but the east side. The only feature in the central room is a rectangular, slab lined firepit in the southeast quarter; there is no bench or floor division. One of the attached bins is complete, and portions of 6 others remain. The average length parallel to N to the room wall is 5 feet and the width is assumed to have been some 3 feet. This central room and attached bins were apparently under a single roof.

CONSTRUCTION: A low foundation or base of small vertical slabs; upper wall of adobe and turtlebacks. Both slabs and turtlebacks were heavily plastered giving a superficial appearance of a solid adobe wall.

POTTERY: 2 fragmentary sherds and P I From the refuse filled bins on the north came 1 La Plata/Black on Red bowl, 1 effigy jar in Lino Grey, 1/2 a Lino Black on Grey bowl. Sixty four sherds were taken from undisturbed portions of the central floor: Lino Grey 58, Lino Black on Grey 2, White Mound 1, La Plata 2, Abajo Red on Orange 1.

This sherd count does not agree at all with those found by W.L. Bliss and Reported by Kluckhohn ((1939 p. 26)) in pit structures in the same area. They list a variety of types from Lino to and including Escavada Black on White and Wingate Black on Red.
to be used for rapid use when examining collections of material.

In this present paper (it is possibly unfortunate but) the artifacts are described in two divisions, first those that were found together in a group in room 34 which was presumably a workshop, and second, those recovered from the remainder of the site. Those from Room 34 were in the main in the nature of ornaments or materials therefore and there is little duplication except in the sections on chipped stone.

This section assumes the reader's familiarity with similar sections in the publications on Bc-50(Tseh Sā) and Bc-51. No attempt will be made here to duplicate the distributional studies in the later.

The materials from Room 34 are described first with notes on the occurrence of materials. Following this are lists under each class showing the materials recovered from both the 1939 report and from the 1944 and the totals.

Thus the variations within classes and the preponderance of various types can be readily seen. Any notable variations between the two groups are next discussed and following this the significance of types is noted.

IMPOUNDERABLES OF EXCAVATION.
MINER ARTIFACTS:

MINOR Recovered from refuse filling the northern bins:

Ornaments:
  Fragments of 4 glyceremeris braclets

Minerals: 40 fragments of worked turquoise, portions of beads, inlay, pendants etc. 12 small nodules of azurite of which 3 show working. 1 quartz crystal and 1 small

Flaked stone: 1 cfrude crude knife or scraper, 1 large/projectile point, Morris's

Straight Stem, Symmetrical Barbed type/ which he dates as typical of BM III

5 PI times. (1939 pl. 126 ) similar points were recorded from the 1937 work ((Bohannan in K & R 1939, p 91 - 92))

Bone: 4 bone awls, 2½ to 3 inches in length, of mamal leg bone, heads unaltered except by splitting.

SUMMARY:

The predominance of Lino Grey and Lino Black on Grey in the floor sherds and in the burials which were made after the abandonment of the structure would on from the basis of pottery place it in BM III times. The fact that the central this room lacked a floor division and that the bins were attached to the central room, foreshadowing the
MINOR ARTIFACTS - SITE BC-51

The sections of the BC-51 report of 1939 which deal with artifacts are extremely wide in scope. The subjects treated by individual authors are: Utilized Rocks and Minerals, by Douglas Osborne; Ground and Pecked Stone Artifacts, Richard Woodbury; Arrow Shaft Tools, Joseph Toulouse Jr.; Projectile Points and Chipped Implements, Charles Bohannon; Artifacts of Perishable Materials, Harry Tschopik Jr.; Artifacts of Bone, Antler and Shell, Mary Whitmore.

Though excellent descriptions of the artifacts are furnished, the bulk of these individual papers is devoted to distributional analyses of the material treated. Kluckhohn who directed the publication chose this course since the material recovered varied but little from that of nearby BC-50 (Tseh So) exhaustively treated by Brand, Hawley and Hibben. (Tseh/BC So, A Small House Ruin in Chaco Canyon, New Mexico) and the lengthy descriptions would result in considerable duplication of effort. Kluckhohn naturally presupposes the reader's familiarity with the earlier publication on Tseh So (called BC-50 in the 1939 report).

Secondly, Kluckhohn considered that since distributional analyses were lacking for many of the less sensitive types of artifacts their rigorous development would provide an especially suitable discipline for graduate students. The results of these analyses:

"In one or two cases the preponderance of the actual evidence amassed appears to be of a negative character - that is, certain types of artifact types seem to turn up in almost every region and in almost every period, so far as we can tell at present. On the other hand every analysis suggests, I think, at least one (and in some cases a number) of hitherto unrecognized clues as to "type fossils" of regional and period cultures." (Kluckhohn, 1939, p.9)

While the distributional maps and the discussions are extensive, the clues to "type fossils" are not clearly enough indicated in the text.
MATERIALS FROM ROOM 34

A total of 1,400 artifacts and raw materials for artifacts were recovered from room 34. They are treated separately here because their great number and variety serves to point up both the wide range of material and the extent of trade which is evidenced at a single site. The minerals particularly are interesting when it is remembered that the Chaco is a country of massive sandstones supplying only occasional silicious pebbles on the mesa tops and scattered exposures of petrified wood and other cryptocrystalline quartz in the bad-lands north of the canyon.

It is located on the east central side of the site, second tier from the east exterior. During the excavations of 1937 or 1938 the room walls had been outlined to a depth of slightly over a foot but the room had not been cleared. Part of the walls forming this room are shown on the published plan of the site but the area was not numbered. (Kluckhohn and Reiter, 1939, Map 1).

Fill in the room was in 2 distinct levels. The bottom 3 to 4 inches above the floor was in thin layers of wind deposited sand, representing a time interval between abandonment of the room and collapse of the upper story. On the floor were 3 pottery vessels. These are not described here as they are considered as being separate from the major deposit.
The fill above the sand layer was entirely wall and ceiling debris. All of the material came from this upper level of fill and from the north half of the room - an area 4 x 5 feet square and a foot and a half deep. Since the cultural material was separated from the floor level and mixed with wall and ceiling debris it is reasonably certain to have come from a collapsed second story room.

**CHIPPED STONE**

There are 83 pieces in the following sub-groups. Surprisingly, obsidian was the most prominent material, in a much larger proportion than recorded for the rooms previously excavated in this site. Proportions of the stone represented were: obsidian 61 pieces; chalcedony 17; jasper 5.

**PROJECTILE POINTS, STEM WIDER THAN SHOULDER:**

Forty. Though proportions vary somewhat from wide, relatively thin points to long slender and beautifully proportioned examples; they are all basically the same - triangular blades with notches set at right angles to the long axes. This is Kidder's type 3a and Morris describes them as above noting that they are "The typical arrow point of Pueblo III" (Morris 1939, Pl. 122).

There are 22 obsidian points in this group and taken together they are the longest and best made of the lot. Sizes in obsidian
range from lengths of 0.7" to 2" and from 0.5" to 0.9" in greatest width across the base. The 12 chalcedony or petrified wood points are also well flaked though there is more range in quality than on those of obsidian. Lengths range from 0.15" to 1.6". The 4 jasper points are smaller, rather thick and do not show the fine chipping of the other materials.

PROJECTILE POINTS: EXPANDING STEM NARROWER THAN SHOULDER:

Three. The notches are set at an angle of 45 degrees to the long axes. The three examples are fragmentary and measurements were not taken.

AXE (Fig. )

The piece is certainly an axe in shape though chipped from obsidian. It is 2.3" long and 1.3" in greatest width. The chipping is by percussion, large and coarse and the edges are sharp, showing neither pressure retouching nor extensive use.

KNIVES

Two. One as unusual piece, obsidian flaked into a large thin triangular blade 1.7" by 2.8". Following the chipping it was either deliberately ground or usage has removed all traces of chipping on the edges. The edges are rounded rather than sharp which possibly indicates usage instead of deliberate grinding.

The second piece is a leaf-shaped blade of jasper 1.5" long.
SCRAPERS:

Thirty-seven pieces all large obsidian flakes, crudely shaped, one concave edge of each shows retouching or spalling as the result of use. The concave shape of the retouched edges suggests use as scrapers or draw knives. Lengths range from 1.5" to 3".

SOURCES:

The Jemez Mountains to the northeast are the nearest source of obsidian. Osborne who compared obsidian implements from Chaco with obsidian from the Jemez site of Unshagi concluded only that both groups of material did not come from the same flow. This is not surprising considering the wide occurrence of obsidian in the Jemez and the interior location of the Unshage. (Osborne, D, in Kluckhohn and Reiter, 1939, p. 56). The nearest sources of chalcedony and jasper are in exposures of the Ojo Alamo, a conglomeratic sandstone found within 15 to 20 miles to the north.

GROUND STONE, TABLET:

One piece, a small, fine grained sandstone tablet, 1.5" by 2.0" and 0.2" thick. It is well shaped and one corner is ground to a sharp edge.
ROCKS AND MINERALS:

TRAVERTINE (MEXICAN ONYX)

One well bended piece worked to a slim cylinder, 1.7" long and 0.25" in diameter. One end is flat, the other conical. The piece is smooth and appears to have had considerable use. Similar pieces have been found with a burial at Bo-59 in a position which suggests that they were worn, with other minerals, in a pouch hung from the neck.

TRAVERTINE

Fifteen cylinders ranging in length from 0.7" to 2.7" diameters are fairly constant, averaging 0.5". The sides of the cylinders are rather rough and irregular retaining the form of the original deposits. In contrast the ends are squared and highly polished and it would appear that these are not pieces in the process of manufacture into well formed cylinders with conical ends, but had reached their final form.

The closest known source of Mexican Onyx is in the area of Grants, New Mexico, an air line distance of 65 miles. Other deposits are recorded from the Jemez Springs and Placitas district. (Northrop, S. A. 1942, pp. 93-94)

QUARTZ CRYSTALS:

Fourteen, 9 were complete crystals, the remaining 5 broken pieces. They vary greatly in size, running from 0.5" to 2.2" in length and up to 2" in cross section. The ends of the 9 complete crystals show extensive use as graving or abrading tools. Small
crystals show only slight wear as though the sharp apex had been employed as a graver, while the pyramidal ends of the largest crystal have been worn nearly away. It appears to have been employed in coarse work such as the finishing of grooves in axes.

Brand (1937, p. 61) suggests exposures of the Ojo Alamo, Puerco and Torreon formations some 12 to 18 miles, to the northeast, to be the source of rock crystal. Considering the transported nature of the formations and the other, badly worn inclusions in them this seems unlikely. Though Reeside (1924, p. 37) notes that inclusions in the Puerco sandstone and chiefly grey chert and quartz. Northrop (1942, pp. 258-261) lists numerous locations in New Mexico where quartz crystals are abundant.

GILSONITE:

321 beads, 2 pendants, 5 fragments from inlays. The beads are small rather fragile and were of a dull brown color prior to cleaning. Of the pendants 1 was rectangular approximately 1" long, 0.5" wide and drilled for suspension. The other, less well made was roughly circular, 0.7" in diameter and drilled at one edge. The 5 fragments showed one to three squared edges each;
they were much thinner than the pendants and apparently came from inlays.

Gysozite, a brittle variety of asphalt is reported from Utah, western Colorado and from veins in sandstone southwest of Aztec New Mexico.

HEMATITE:

Two cylinders, each 0.7" long, 0.3" in diameter. They are well worn, one has flat planes ground on the sides. Morris (1839, p. 131) refers to them as paint cylinders, believing that they had reached their cylindrical shape by grinding larger pieces for paint. In view of the careful working and the squared ends it would appear from that the cylinders reached this shape intentional rather than fortuitous grinding.

MALACHITE:

One large nodule, 0.8" in largest diameter. It is well worn, all surfaces show fine wear, not abrasion or flat planes as though the piece were ground for pigment. Appearance is of a stone carried for some time in conjunction with other stone or hard substances. Malachite is prevalent both to the south in the Zuni Mountains and to the east in Jemez district as well as other more distant parts of New Mexico and Colorado.

OCHER, RED:

One piece, soft and crumbly, does not show working. It is probably from local deposits.
TURQUOISE, RAW

52 pieces, ranging in size from small chips to pieces 1 inch long. The matrix in this raw turquoise ranges from tan to grey with some small black inclusions. Color of the turquoise runs from deep green to clear blue. These later stones are the exception, most of the pieces being green. Eight of the pieces show the beginning of the manufacturing process; one side of each has been ground flat.

TURQUOISE, WORKED:

341 pieces. They are in varying shapes many are small, roughly squared pieces which seem to be blanks for beads; others larger, shaped as though they came from or were intended for elaborate inlays. It was not possible to piece together any of the larger, well shaped fragments.

SHALE:

222 beads and 2 pieces of inlay. The beads and inlay are well worked from orange red shale; the beads are much smaller than those made from either gilsonite or shell. Large deposits of shale are exposed within a few miles of the site, both to the north and west.

PEBBLES:

22 silicious pebbles, diameters from 0.2" to 0.7". None
have had their natural shape altered but all have worn or polished surfaces which show definite use. One piece of moss agate shows 2 well worn surfaces. Similar but unworn pebbles are common on the top of the Chacre Mesa.

**BONE MATERIAL:**

**TUBES:**

90 tubes or tubular beads in a great variety of sizes and in all stages of manufacture. They range from small thin beads (?) 0.5" long to large tubes 2.2" long and 0.8" in diameter. One section of bone bears preliminary cuts made to divide it into 4 tubes. Other tubes have been cut from both sides and then broken through the center. On completely finished tubes the ends have been ground smooth and the whole is highly polished.

Morris (1939, p. 123) discusses at length the manufacture and use of tubular bone beads and bone tubes. He lists these recorded instances of their use: frequently strung as necklaces; strung alternately with canyon walnuts as a necklace; a set tied in pairs, several being caught together at the ends to form a cluster; as parts of wrist guards; occasionally as stems of tubular pipes. He notes also that the long and more slender ones can be used as turkey or game calls.
BIRD CLAWS:

31. Bird claws ranging from 0.4" to 1.0" long. None are perforated and none show working.

BIRD BEAKS:

2. Upper beaks of large birds, possibly crow or raven. They are not worked. (Morris, 1939, p. 143) notes a crudely worked bird beak in a medicine outfit from burial 27/10 on the La Plata.

SHELL:

The collection of shell is small, 3 olivela with the spines ground off; 3 small flakes which are possibly haliotes but are too small to identify; 2 fragments of massive shell, showing random cuts and scratches, possibly a valve of glycemiris.

POTTERY:

4 pieces, 2 bowls, 1 pitcher, 1 jar. These are illustrated and discussed in the section on pottery.
<table>
<thead>
<tr>
<th>Item</th>
<th>1949</th>
<th>1950 report</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axe, full groove, single bit</td>
<td>10</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>Axe, full groove, double bit</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Axe, notched</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Fleshers (t camahia )</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Stone disks</td>
<td>5</td>
<td>14</td>
<td>19</td>
</tr>
<tr>
<td>Hoes</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Flat Mortars</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Mauls</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Sandal last</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Lapidary Stones</td>
<td>4</td>
<td>22</td>
<td>26</td>
</tr>
<tr>
<td>Stone dishes</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Paint Pallettes</td>
<td>0</td>
<td>2</td>
<td>2</td>
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<td><strong>TOTAL</strong></td>
<td><strong>2</strong></td>
<td><strong>4</strong></td>
<td><strong>6</strong></td>
</tr>
<tr>
<td><strong>Arrow Shaft Tools</strong></td>
<td><strong>34</strong></td>
<td><strong>54</strong></td>
<td><strong>88</strong></td>
</tr>
</tbody>
</table>
AXES

Ten full grooved, single bitted axes were taken from the fill in rooms 15, 16, 30, 40, 42, and 48. They varied from those in good condition to examples which may have been relegated to use as mauls; nevertheless these later are still classes as axes since there is no sharp dividing line between the various examples and their original form was as axes. There is considerable range in size; the shortest was 5" and the longest 9"; widths ran from 2½ to 3½".

Variations: One double notched axe with triangular cutting edge. None are reported from 1939 though Hibben lists "several" from Bc-50 ((1937, p. 99)). The 1939 report also lists one double bitted axe.

Significance: There is no apparent significance between the two groups. The finding of a single example of the double notched axe is not unusual; Woodbury notes that they were known at Aztec Ruins and apparently center in the San Juan.

FLESHERS (Tcamahia)

Four examples all fragmentary. The widths are all preserved however and are fairly uniform, 2" to 2½ ". Two are finely banded hornstone, one is dark slate and the other sandstone.

Significance: None are reported in the 1939 paper though Woodbury being an author discusses them as possibly unnotched/axes and finds that they appear to be characteristic of the San Juan.

STONE DISKS

Five, all of fine, greenish sandstone of much finer particles than that found in the immediate area. At least one surface of each is well smoothed and polished. Edges are either well chipped or pecked or ground. Three show definite traces of paint/on one surface. Considering this
and because they are better finished than the usual run of "pot covers" they are thought to be a form of paint mortar or palette.

**Variations:** No appreciable variations between these and those reported from *from* the 1939 work, Bc-50 or Leyit Kin.

**FLAT MORTARS:**

Two, large well finished slabs of fine grained sandstone: 8\(\frac{1}{2}\) x 8\(\frac{1}{2}\) x 1\(\frac{1}{2}\)" and 11\(\frac{1}{2}\) x 15 x 2". Each has a shallow, basin shaped depression in the center. This is 5" in diameter and 1/2" deep. Both depressions retain traces of red mineral, probably hematite. Similar mortars (?) are not reported from the 1939 publication, the work at Bc-50.

**MAULS:**

Two, both are sandstone and large, the heaviest weighing some 8 pounds. They have full grooves and both ends of each show use. Rooms 15 and 48

**Variations:** Three mauls were reported in the 1939 publication by Woodbury and though the material is not definitely identified it appears to have been sandstone also. He finds some difficulty in distinguishing between mauls and hammers and found that the greatest distinction in this general class of tools was in the nature of the grooves. The distribution is similar to that of axe though the aerial distribution of the full grooved maul is somewhat greater than that for the corresponding type of axe. (Woodbury 1939 p. 74)

**SANDAL LAST:**

One fragmentary example. None were reported by Woodbury though Hibben shows one complete example from Bc-50.
LAPIDARY STONES

The four pieces in this classification are fragments of well worked, fine grained sandstone rectangles averaging 1/2" in thickness. Their greatest length appeared to be not more than 3 1/2", since they were small, well worked and exceedingly smooth they were possibly employed in shaping and finishing turquoise and similar pieces of "jewelry." Rooms 45 and 48.

Variations: Twenty two whole and fragmentary sandstone slabs were reported by Woodbury in 1939, none from Bc-50 or Leyit Kin. In general those from the earlier work are larger and thicker and Woodbury ascribed no use to them.

STONE DISHES: small are/crude and Three, all/appear to have been worked from natural sandstone concretions. Diameters average 2 1/2"; they came from rooms 47, 53 and the bench of Kiva 7.

POLISHING AND SHAPING

ARROW SHAFT TOOLS:

Two, both fragmentary from Room 15. Both are sandstone, have a single groove and were presumably used as abraders.
**Objects of Bone**

<table>
<thead>
<tr>
<th>Awls of Bone</th>
<th>1949</th>
<th>1939</th>
<th>Total</th>
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<tbody>
<tr>
<td>Head wholly removed</td>
<td>34</td>
<td>12</td>
<td>46</td>
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<tr>
<td>Bone splinter awls</td>
<td>4</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>Rib awls</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Unworked except for splitting</td>
<td>3</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Worked on whole surface</td>
<td>0</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Bird bone, whole</td>
<td>3</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Bird bone, splinter</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

| Needle                       | 1    | 0    | 1     |
| Chisels                      | 0    | 4    | 4     |
| Punches                      | 2    | 0    | 2     |
| Scrappers or Flavershers     | 7    | 5    | 12?   |
| Antler (Flaker ?)            | 3    | 1    | 4     |
| Tubular Beads *              | 92   | 1    | 93    |

*90 tubular beads from room 34 are included here*

| Bird Claws                  | 31   | 0    | 31    |
| Bird Beaks                  | 2    | 0    | 2     |

*From room 34*

| Total                        | 105  | 11   | 116   |

**Objects of Bone**

Miss Mary Whittemore who made the 1939 study of bone material followed Kidder (1924) in classifying the objects and added one type of bone awls, "Awls worked on whole surface."

**Variations:** As regards the assemblage of bone material as a whole, there is no significant difference between the two lots. In the group of awls Whittemore shows the class "Head of bone wholly removed to be the largest awl" we do also. However if the type we proposed, "Worked on whole surface" were added to Kidder's class, "Head of bone wholly removed" as it is shown in the 1949 figures, the proportions of the two lots are even closer together.

What variations the two lots do show in the remainder of the bone
artifacts are negligible and probably due to the vagaries of classification — the difficulties of distinguishing between awls, punches and flakers and between chisels and fleshers. Adding the bone tubes to the 1949 group from Room 234 to the 1949 group, the only possible significant difference becomes the 90 bone tubes, the 31 bird claws and the 2 bird beaks from the later work. Otherwise the 182 objects of bone added to the list by this excavation do little but increase the size of the total sample from Bc-51.

Significance: There apparently no "type fossils" noted in the bone material since Miss "hitemore" concluded that "Differences except when taken by proportions of occurrence do not seem to bulk very large. Awls are, in general, similar because materials and functional restrictions make this almost inevitable." (Whitemore in Kluckhohn and Reiter, 1939, p. 146)

Provenience of awls,
Refuse fill of rooms 30, 39, 40, 42, 45, 47, 48, 53 (38)
Fill, kiva, 7 (3)
Exterior refuse (44)
OBJECTS OF BONE

AWLS:

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<th>Quantity</th>
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<tbody>
<tr>
<td>Head of bone wholly removed</td>
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<tr>
<td>Bone splinter awls</td>
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</tr>
<tr>
<td>Unworked except for splitting</td>
<td>3</td>
</tr>
<tr>
<td>Bird, leg bone, Head intact</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>44</strong></td>
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Provenience: refuse fill of 8 rooms*

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<td>exterior refuse</td>
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<td><em>(Rooms 30, 39, 40, 42, 45, 47, 48, 53)</em></td>
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NEEDLE

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PUNCHES

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END SCRAPER OR FLESHERS

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AXTLE, FLAKER (?)

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<td><strong>3</strong></td>
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</tbody>
</table>

TUBULAR BEADS

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exterior refuse, rooms 15, 42, 48</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>59</strong></td>
</tr>
</tbody>
</table>

Provenience:

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td><strong>138</strong></td>
</tr>
</tbody>
</table>

[182]
### Chipped Stone

#### Projectile Points

<table>
<thead>
<tr>
<th></th>
<th>1949</th>
<th>1939</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expanding stem, wider than shoulder</td>
<td>14</td>
<td>40</td>
<td>10</td>
</tr>
<tr>
<td>Expanding stem, narrower than shoulder</td>
<td>5</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Straight stem</td>
<td>2</td>
<td>00</td>
<td>2</td>
</tr>
<tr>
<td>Axe form</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Triangular, unnotched</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Scrapers

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Blades</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Spear Points (?)</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Making up 27 other, 34 Rm.

Materials

- Chalcedony
- Petrified wood (21)
- Obsidian (2)
- Agate (4)

Proofence - refuse fill in rooms 5, 39, 40, 42, 45, 49, and exterior refuse (7) wall niche, room 45 (2)

While the proportions of the various classes of projectile points are somewhat similar from the both years work there is a far greater preponderance of points with "expanding stem wider than shoulder" in the 1949 excavation. The greatest significance is probably in demonstrating the vagaries or imponderables of excavating - where a portion of a single room produces an amount of chipped implements equal to all the remainder of two years work in approximately 43 rooms.
These are all fragmentary and were recovered from the refuse found in room fills: approximately 50 fragments and cips of worked turquoise, nodules of azurite and malachite, 1 broken quartz crystal, 4 pieces of glycemesis bracelets, 1 piece of gilsonite which shows the preliminary cuts made in shaping the piece into an ornament.
There is some significance in provenience of the projectile points. Of these/with expanding stem narrower than shoulder and the 2 with straight stems, 3 of the former and both of the later came from Pit House A. None of the prevalent "typical Pueblo LII" points with in which the expanding stem is wider than the shoulder were found in this pit house. Bohannon who studied the 1939 material from 1939 in conjunction with the distribution of various types records 3 similar forms and ascribes them to BM LLI. (Bohannon, in Kluckhohn and Reiter, 1939 p. 92.

Most unusual in the collection are the 3 triangular, sixxight points with straight bases but which are unnotched. Bohannon who had no examples to study from the site lists this as an early, notched atl-atl point. Notes that they are reported for Bo-50 and suggests that they are an early, notched atl-atl point similar to those found by Kidder and Gurnsey. No sizes are given and we prefer to consider these simply as a variation in small arrow points similar to Kidder's class I c. ((Kidder, 1924 p. 16))

The axe form and the 37 obsidian scrapers are discussed under the artifacts from room 34.

Two large chalcedony blades came from a sealed wall niche in room 45. They are both 4 ½" long and perfectly matched. Neither shows any wear from use. A ¼ portion of a third blade came from the fill in room 48.
ASSOCIATIONS

There were 10 instances of pottery associations, involving 31 vessels of decorated ware. These came from burials within the rooms, from pices in situ on floors and restored from sherds in refuse filled rooms.

Of the 31 pieces Mancos Black on White is the most numerous with 9 examples; Gallup was second with 6, Chaco and Escavada next with 3 each and one piece only of Wingate Black on Red and a variant of Forestdale Smudged. There were 3 pix vessels which were not classified: an unknown Black on Red possibly Wingate, one foreign Black on white bowl and an unidentified ladle.

No very definite trend is discernable in these associations. Mancos, the most numerous type is associated with Gallup in 5 instances out of the 16. Mancos is also found with McElmo and with Chaco twice and in one instance each with Escavada, Wingate Black on Red and the Forestdale variant. There is one case of 2 Mancos vessels together without other pottery.

Gallup, in addition to the 5 Mancos associations was found with Chaco 3 times, with Escavada twice and the Forestdale variant once.

McElmo the third in preponderance was associated with Mancos in Two cases and with Escavada once. There was also one group of 3 McElmo pieces found with together with one of the unidentified bowls.

Five of the groupings show a mixture of Chaco types (Chaco, Gallup Escavada) with the San Juan (Mancos McElmo). The other 5 associations show only 3 cases of Mancos being associated with another Mancos or McElmo vessel, and the one case of the 3 McElmo pieces and a single instance of Chaco and Gallup only being found together.
While the series is too small to draw any conclusions, there seems to be a tendency for the Mancos/ McElmo types to be grouped together while the Chaco, Gallup, Escavada (Chaco) types are scattered more indiscriminately through the series.

Due to the selective nature of the work the location of the various groups within the ruin is almost meaningless. The 4 San Juan (Mancos McElmo) groups and the 1 Gallup/Chaco association came from the northern or supposedly later part of the pueblo while the 5 cases San Juan and Chaco mixture were found in the south or central area.

MINIATURE PITCHERS

are 3

There were miniscule miniature pitchers included in the pottery groups noted. These are well made and well fired vessels, evidently above. In addition, there are 3 others found singly. Of the total 6 minatures 4 have Chaco designs, 1 Mancos and 1 Escavada.

The minatures range in size from 1 3/4 inches to 4 inches. All are the same shape; rather globular bodies merging imperceptably into the necks. There is no sharp line between body and neck as in the large classic Chaco pitchers. The single-handle is attached just below the neck and ends above the widest part of the body.

OTHER:

Other pottery restored from fill sherds include only 1 small McElmo bowl and a large Escavada olla, globular in shape with short neck and small orifice. Handles are inset.

Note: R M April 83 (Pete McKenna). I reidentified these photos at the nec...
From sherds in fill of Room 42

A. unknown, (Mancos?) — see above p. 85

B. Mancos
From fill above floor, Room 15, west central side. First floor, second floor present.

A. marcos pitcher
B. McElmo dipper. (Navajo Dipper - Pete Mekawa April '83)
FIG. Restored vessels from the fill of room 33 3/4 north (late) end of site. These apparently came from the collapsed second story.

A. Gallup

B. Chaco
From floor level of room 25, lower floor level.

A. Escalada pitcher

B. Mc Elmo bowl, miniature.
FIG.  

Pottery association with burial from room 25, in the north (late) side of the site.

A. Mancos
B. Gallup (no way)
C. Chaco
D. Escavada
E. Escavada
Vessels found in situ, floor of room 34 in the north (late) end of the site.  
A. Burned "ingate Black on red  
B. Unknown black on red (rubber-on  
C. Mancos Black on White (rubber-paint)  
Brewer  
April 1983
FIG. From room 34. Found above collapsed ceiling and from either a second story or the roof.

San Juan Thing Peter J. McKern  
A. unknown  "Marcello Bla"  C. Mesa-Verde  
B. Mc Elmo  D. Mesa-Verde ?

Cano-McElmo = 23N. April 82
accompanying an infant burial at floor level, room 53.

A. badly worn and possibly Gallups
B. Forestdale variant
C. Gallups / chaco
D. Mancos. (who can tell?)
Restored from fragments in fuel of Room 47

A. no decoration remains. Is very deep, similar in shape to Marcos

B. Marcos

C. Doubtful, possibly? Probably Reserve 815
Floor level, Room 45

2 conmoy culinary jars (go Pic)
From sherds recovered in field of Room 40
and material present.

525: Base of chaco 15/16 potsh.
526: Gray clay pot - unknown (P/C8) (P/C8)
527: Seed bowl - unknown - morph - 3 lines.
528: Base potsh - unknown - morph - 3 lines.
Late Red Mesa Sh. - P.M. April 03

Very large
N. Band
olla.

Very large
N. Band
olla.

From portions of turtleback structure below
room 21.
From floor of Red House A ad 120-51

A. Lmo effigy jar
B. La Plata Black on White Bowl
C. La Plata Black on Red Bowl

ABAJO No bowl PMR 4 April 83