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Report on Bc 524 ("Casa Sombrero")

C85941  
Blue for Victory  
Black pencil - GAB

INTRODUCTION

The San Juan archaeological area, roughly that portion of the four corners country of the southwest in the drainage of the River San Juan and its many tributaries has long been considered an important focus in the Anasazi pattern. The story of this intensively investigated region is too well known to need retelling here, The outline, however, is important. Excavations have shown that there developed in this area with the aid of certain external stimuli a complicated sequence of cultural development which began some time before the beginning of the Christian era and came to an abrupt end in most parts of the area a little less than a thousand years ago. Throughout its development this evolution, also somewhat paralleled outside the San Juan country, is characterized by a number of horizons which provide convenient designations for studying the material. These are divided into two groups, an earliest Basketmaker and a later Pueblo. The first has two divisions, Basketmaker and Modified Basketmaker, and the latter four, Developmental Pueblo, Great Pueblo, and Historic Pueblo. (Roberts, 1938, p. 32). Of the pueblo periods only the first two are of direct interest here, most of the San Juan area seeming to have been abandoned shortly after the end of Great Pueblo times.

Progressive P, Renaissance  
↑  
EH. Blinn

Basketmaker: These were a semi-nomadic hunting, agricultural people who planted corn, probably having obtained the

← Pinta

idea from somewhere in the south, and seem to have lived in some sort of perishable dwellings for their houses have not been found. Frequently found both in caves and in the open are their small slab lined storage cists which were secondarily used as places of burial. They were skilled makers of coiled basketry, twined woven bags, ropes, sandals, fur cloth robes and other textiles. The principle hunting weapon was the atlatl and javlin, though clubs and stone knives were also used. At the very end of this period unfired pottery prototypes appeared. These were sundried and usually tempered with cedar bark. These simple beginnings foreshadowed a long and diversified ceramic development which is still going on and which, although the stimulus may have been extraneous, seems to have been local in its development. (Roberts, 1935, pp. 8-17).

*Reiter*  


Modified Basketmaker: As time passed crude semi-subterranean earth lodges were developed perhaps out of the earlier storage cists although this sort of lodge is very widespread in America and may not be a local development here at all. (Kidder, 1924, p. 121). True fired pottery also came to be used. Though this may have been a southern idea, it seems to have had an entirely local development in this area and

probably developed out of the unfired wares of the earlier period through stimulus diffusion. (Morris, 1927, pp. 158-160). With the development of pottery basketry declined although it continued to be made throughout the pueblo development. Beans and several kinds of corn were planted (Roberts, 1932, pp 7-8). Toward the end of the period the bow and arrow began to supplement the atlatl. (Roberts, 1935, p. 8-11).

Developmental Pueblos During this period there were deep and thoroughgoing changes in the culture. About this time there appears a new inclement in the population, a gradual replacement of the long headed basket maker population by a broad-headed, occipitally deformed group. If this actually represents an incursion into the area by an extraneous group some of the new traits such as the grooved axe and the bow and arrow may be thus accounted for. Pottery developed new stylized types and local characteristics. Cotton began to be used in textiles and the turkey was domesticated. (Roberts, 1932, p. 9). Perhaps the most striking changes were in agriculture. The semi-subterranean earth lodge was gradually replaced by structures with free standing walls and only slightly depressed floors most frequently of jacal construction and with several contiguous rooms. (Kidder, 1924, pp. 124-125). These were later replaced by similar structures of coursed masonry which usually included several contiguous flat roofed stone or adobe rooms most frequently

Retter  
L

arranged in the shape of a "U" or an "L". (Roberts, 1935, pp. 8-11). It appears that certain of the religious or other ritual of these people may have been associated with the earlier type of semi-subterranean dwelling and even in the place of a new architectural type they were reluctant to abandon it. At least one and usually more of the earlier structure was built in each of the later villages, apparently as religious structures. This gradually evolved to become the circular, usually subterranean kiva associated with the rectangular rooms of Developmental Pueblo villages as well as those of later periods eventually to become the ceremonial chamber of the historic pueblo peoples. (Roberts, 1929, pp. 81-90). Casa Sombreada's kivas are a part of this development.

During this period began local stylizations, particularly ceramic ones which were later to become much more important. There were two most important local specializations: one centered in northeastern New Mexico and southeastern Colorado.

Great Pueblo: This period was characterized by large concentrations of population in localized areas, and a replacement of the small villages by large towns usually consisting of great multi-storied, terraced, communal houses. The important pueblos of the Chaco Canyon; Chetro Ketl, Pueblo Bonito, Hungo Pavi, and others belong to this period and illustrate it

*Ruta*

well. At this time there were much increased local specializations, particularly in ceramics and wares became so stylized that they can be easily identified as to locality of origin. Three main centers developed; one in northeastern Arizona, the Kayenta area; one in southwestern Colorado and southeastern Utah, the Mesa Verde area; and a third, in which we are particularly interested, in northwestern New Mexico, the Chaco Area. Each of these became definitely divergent and specialized so that its manifestations are easily recognizable. (Roberts, 1935, p. 8-11).

*Butler*

Regressive and Historic Pueblo: At the end of the Great Pueblo period, about a thousand years ago there began a gradual abandonment of the San Juan area. This may have been caused by drouth or by the pressure of hostile enemies. But, whatever the cause, the people began to move southward. Some into the valley of the Rio Grande and others further south into Arizona. Later they passed through two additional important horizons which are of little concern to appear historically as the modern people of the southwestern pueblos. (Roberts, 1935, p. 8-11).

CHACO CANYON

The Chaco Canyon is particularly important as the type locality of the Chaco area. The peculiar Chaco specialization of the Great Pueblo period is best exemplified here. Also much

of the Anasazi sequence is illustrated, the canyon having been occupied at least since Modified Basketmaker times. (Roberts, 1929), (Brand, Hawley, Hibben, 1937, p. 85-87). The canyon is also famous for its many remarkable buildings of the Great Pueblo period which are as fine as any in the southwest.

Hay: Object to all this on the following grounds:

1. Its repetitious: should we put this in all bulletins, think how expensive
2. "not up to date": Roberts prefers his 1941 summary in White Canyon part II.
3. Not original
4. O.K. for a popular, BAE bulletin, but not as good as others.

Charlie Steep?

Wolf:

I know that no one asked for any comments from me but I made a few just the same. Didn't have much time to really read & digest the latest gem of Mullays but would like to later and in doing so may be able to make some comments worthy of this work of art. I'll see you when I get home about it, keep me in mind for help on it, and can be of any use - (and no dirt cracks from you, either) I'd be glad to try. - (notice I said try.)

Love & kisses

Beckwith ← Blumenthal

PART V-No. 1.

THE Location and Environment

The department  
Chaco has assumed that  
has been described,  
and that additional description  
is duplications.  
A Reuter

Casa Sombreada (Be 52, survey number) is situated in a small rincon almost directly opposite ~~the great towns of Pueblo, Bonito and Chetro Ketl.~~ It lies in Section 13, Township 21 N., Range 11 West, on property owned by the University of New Mexico. The canyon, in this vicinity, is approximately one half mile wide and is bounded by high precipitous cliffs of the Chacra Sandstone which occasionally reach a height of ~~more than~~ one hundred feet. Above the cliffs the high surrounding mesa country is reached by passing over several additional terraces, some of which also present appreciable escarpments, ~~until the top is finally reached some three hundred feet above the canyon floor.~~ In this portion of the canyon the cliffs which border it are dissected by innumerable rincones which are usually small blind box canyons bounded on all sides by precipitous cliffs. They appear to have been formed principally <sup>as</sup> by drainage channels through which water passes only <sup>sure</sup> after rains when it drops over the cliffs at the heads of the rincones in an impressive cascade. It is one of these coves which shelters Casa Sombreada.

Almost bisecting the canyon floor the Chaco Wash runs across the bottoms, an extensive, somewhat convoluted arroyo, with steep sides some twenty-five or thirty feet in height which are undergoing very rapid erosion at the present time. This is commonly dry, but after a rain frequently carries a very heavy head of water.

not very  
new  
Everyone has  
done it!  
Reuter

show me one 30' high!

8

The locality supports only a sparse desert vegetation and often appears very dry and desolate, but in certain years there develops a very heavy growth of Russian Thistle which makes the area appear almost verdent. The principle vegetation consists of black greasewood (Sarcobatus vermiculatus), crownbeard sunflower (Verbesina encelioides exauriculata), and the above mentioned Russian thistle (Salsola pestifer) interspersed with a number of smaller and less obvious plants and grasses. The vegetation is characteristically low and insignificant, the black greasewood being the only plant which grows more than stirrup high.

This immediate portion of Chaco canyon seems to have been among the most heavily populated localities of the area of intensive occupation which lies roughly between Peñasco Blanco and Shabik'eshchee Village, a distance of about eleven miles. From the mouth of the rincon in which Casa Sombreada is located may be seen in the immediate vista many of the most important of the Chaco ruins. Directly across the canyon are the great towns of Pueblo, Bonito and Chetro Ketl, while above them on the top of the mesa the walls of Pueblo Alto rise against the horizon. Across the canyon to the north-west lie the ruins of Casa del Arroyo, Casa Chequita, and Casa Amarilla while further down the canyon the site of Peñasco Blanco may also be seen against the horizon. Some three hundred yards to the west lies

*The ruins of the mesa are situated  
The Kletch on Yellow House  
The Spanish bar on lower mesa.*

~~In~~ the great kiva, Casa Rinconada, while to the left in the immediate vicinity of the mouth are the closely situated ruins of Bc 50 and Bc 51, excavated by the University of New Mexico Field Schools from 1936 to 1939. To the right lies Bc 53, a ~~small village site~~ also excavated by the University of New Mexico Field School during the seasons of 1940 and 1941, ~~the same years as the operations of Casa Sombreada~~ (See Figure

an

The rincon which shelters Casa Sombreada is extensive one cut deep into the escarpment which form the southern wall of Chaco Canyon about a quarter <sup>of a mile</sup> to the east of the ~~present~~ University of New Mexico Research Station. It is somewhat under a half mile in ~~maximum depth and averages somewhat under a half mile in maximum depth~~ and averages perhaps a thousand feet <sup>in</sup> width, being bifurcated at its southern end where <sup>enter</sup> two small intermittent watercourses ~~enter it and~~ <sup>to</sup> converge to form an incipient arroyo, which ~~seems to have been subjected to extensive erosion only rather recently, and which extends northwest to drain into the Chaco Wash about three quarters of a mile to the north.~~

The rincon is bounded by precipitous walls of the Chacra Sandstone superimposed over the Allison Member, here composed principally of soft shale, interspersed with lenses of sandstone. The walls average somewhat over one hundred and twenty-five feet in height, their upper portions being composed of a substantially

*Quite a sentence!  
Peter*

*7.5 miles?*

*Is this  
tell this  
Peter*

perpendicular though somewhat dissected sandstone escarpment composed of the Chacra Sandstone, ~~while~~ the lower portion is a steep talus slope. Important in the erosion in this part of Chaco Canyon seems to have been the rapid disintegration, due to water and wind erosion, of the subordinate shale member. This weakened the overhanging portions of the massive sandstone above causing large sections to break off <sup>and</sup> ~~to~~ roll down the talus, ~~and be rendered into fragments.~~ ~~Thus the talus slope is composed to a great extent of large, irregular blocks of sandstone, much sand from the completely disintegrated rock, together with a small amount of surface humus which is a function of the limited vegetation.~~

~~The western finger of the bifurcated head of the rincon is somewhat wider and less deep than the other. A large portion of its western wall is formed by a narrow spur which juts out into the canyon bottoms from the southern wall. This spur is very long and narrow, but it presents a precipitous escarpment on both sides.~~ In most places about the periphery of the rincon the talus is exceedingly steep and rough, usually being difficult to traverse. However, close under the portion of the western wall which is formed by the narrow spur about a quarter of a mile south of the mouth the talus is a little less steep, the ever present large rocks being more completely covered with sand and shale, and the whole presenting something vaguely approaching a level surface some three hundred feet long and averaging

*This is all too wordy*

perhaps seventy-five feet wide. This location was selected by a group of the prehistoric inhabitants to serve as a village site. Though perhaps the best talus top site to be found in the rincon, it is still very rough and irregular, compared to the excellent bottom land sites so extensively used by the Chaco Canyon peoples. ~~Compared to the latter,~~ <sup>however,</sup> this location offered some very real obstacles to the construction ~~of the Chaco Canyon type of dwelling.~~ To a certain extent fills and terracing were necessary and the labor expended here must have been much greater in proportion to the results than for the bottom land sites. All this suggests that the inhabitants must <sup>have</sup> had a definite reason for building <sup>here</sup> ~~this as well as the other talus sites to be found in the canyon,~~ instead of <sup>on the canyon floor</sup> ~~building in the bottoms~~ as did most of the inhabitants of Chaco Canyon. Just what this reason was is somewhat obscure. Though talus ruins are by no means uncommon in the Chaco area, they do not occur with anything approaching the frequency of the bottom land sites and to date have been little investigated. Several possible reasons suggest themselves for the construction of this talus village, none of which seem very plausible. It is improbable that they were so elevated for fear of their being washed out, ~~the possibility that frequent severe wash outs may have occurred in this rincon in prehistoric times being made doubly improbable by the fact that~~ there are three ~~other bottom land~~ ruins which lie directly in the mouth of

*[Handwritten mark]*

the rincon. That it may have been selected as a defensive position is almost beyond the range of possibility for this position would have been more difficult to defend <sup>especially from above,</sup> than almost any other situation in Chaco canyon. An enemy could easily annihilate the population of such a village by the simple expedient of <sup>rolling</sup> hurling a few large rocks over the top of the cliff.

There also remains the simple but vastly more plausible possibility that the talus top location was merely a very pleasant place to live. The place is of comparatively easy access, ~~the~~

Muti!

~~view, overlooking several acres of tillable land in the rincon bottoms is excellent, the elevated situation is much cooler than the bottoms, catching many stray breezes that are entirely missed below, and last but not least, probably as important to the inhabitants of the village as it was to the excavators who thought it important enough to name the village after this particular feature, the precipitous sandstone cliff against which it is built entirely shades it in the hot afternoons.~~

Don't believe to except afternoons

put this in reverse

What's this? an entrance?

Charlie (Stoop?)

Bill: put in hiding: I mean, the location seems only a little of the canyon floor. It is well hidden, in part, from the floor, et al

Also: the obvious; This site would have been more comfortable in cold weather due to morning sun, wind protection.

Why not tabulate these possibilities

PART V. No. 2

THE EXCAVATIONS.

Casa Sombreada had been known to the archaeological staff of the University of New Mexico for a number of years. ~~It was noted on Dr. Reginald Fisher's archaeological survey of the Chaco area and was designated Bc-52.~~ In 1936 University of New Mexico Field School students under the direction of Dr. Clyde Kluckhohn, made drawings of the many petroglyphs on the cliff walls immediately associated with the ruin. ~~Throughout this time, however, it attracted little attention, being so well buried and its contour so well concealed by the mantling talus slope that little indication of its presence was apparent.~~ There were no walls exposed and <sup>level surface indications</sup> the only ~~indication~~ that there might once have been a sizeable structure ~~here~~ were the numerous viga <sup>sockets ← (DeLong)</sup> ~~seats~~ which were deeply pecked into the supporting cliff. These suggested a multistoried pueblo, but a superficial observation of the talus slope in the immediate vicinity lent weight to the view that, though an extensive village might well once have stood here, its very foundations had long since been washed down the talus slope.

At the beginning of the 1940 field season the staff began casting about to locate a small, simple structure which might serve as a demonstration for the preliminary instruction in archaeological technique of the elementary class in archaeological field work before beginning work on an appreciable talus unit, the in-

Good

~~\_\_\_\_\_~~

L

134  
Tut -  
This whole  
paragraph belongs in here to  
help show about the lead for  
the author since the exca-  
vation was carried out  
by Tut -  
SAB

vestigation of which was to be the primary problem of the field season. Several other sites were suggested and abandoned because they were feared to be too extensive for the purpose in mind and at last Casa Sombreada was selected, not without some misgivings, for it was thought that the remains extent would hardly be extensive enough to provide the short preliminary demonstration in the principles of excavation technique and in note organization which was desired. How wrong the investigators were was proven after a single day's excavation. The site proved to be very extensive and required the full 1940 season, and the first two weeks of the 1941 season to complete.

Delong  
Paster

As the extent of the remains could not be determined superficially, the first excavation was guided by the location of the several rows of superimposed viga seats which extended over the surface of the cliff for a distance of about forty feet. Though ~~the talus slope was perhaps a little less steep in this vicinity than elsewhere, the more or less level area on which the village was built was completely masked by the talus debris which had been deposited after the abandonment of the town. In general there was but little to distinguish this portion of the slope from the rest of the rincon.~~

Sherlock!  
(Paster)

Excavation was begun with a shallow trench which shortly disclosed a wall. From this beginning the <sup>first</sup> students outlined the various contiguous walls with similar shallow trenches. As

the upper rooms turned out to have but low remaining walls and the room fill to consist principally of steril talus debris, the fill was shoveled out and removed to a level of within about one half foot of the first floor, being examined for cultural material meanwhile by the students. Below this the fill was carefully troweled and screened where thought advisable. Whenever practical, check blocks were left in the corners of rooms, and their profiles recorded after the completion of the rest of the excavation. These blocks were always left in the rooms as long as possible, and were thus available for checking student field notes.

As soon as rooms were exposed they were assigned numbers and henceforth referred to by numbers both in the field notes and on specimen bags. Rectangular rooms were numbered with Arabic numerals while Kivas and other circular rooms were designated by Roman Numerals. Certain areas were assigned room numbers which were not rooms at all, but otherwise represented significant units of material, or were thought to represent such units at the time of excavation. These original numbers have been preserved on the final maps, as material is catalogued according to them. Thus there are more room numbers than actual rooms in the structure. As rooms were defined, groups of students were assigned to each of them and made responsible for their further excavation and recording. Their field notes were checked against those of the field staff. Artifacts were placed in paper sacks

*yes but should be included for reasons or previous page  
PAB*

*is germaine. Peter*  
*But, I am not sure that all this*

with appropriate information and sent to the laboratory at the Research Station where they were preserved, restored, and catalogued, being numbered in the catalogue series of the Museum of Anthropology of The University of New Mexico. Artifacts were recorded according to horizontal position, usually from three room corners, and distance above a specific floor wherever possible. In certain cases material had to be recorded with relation to the datum point. As most of the fill represented only simple depositions, most of the bulk sherd and similar material was divided into two general field categories according to room numbers; material associated with specific floors and material found in the fill above specific floors. As rooms were finished they were photographed and scale drawings were made of them and their significant features.

Coincident with the excavation, plane table maps were made of all features encountered, material being recorded on the map as soon as possible after being exposed. This, together with the unusually large numbers of photographs taken of every possible phase of the situation, supplement the usual field notes most excellently and make an unusually accurate record of the material encountered.

It soon became obvious that the structures were going to be ~~very~~ much more complicated than was at first anticipated. It became evident that there were several levels of occupation rep-

*I don't know it!  
M.D. Lamerthal*

*In fact I doubt it.  
Bate*

copy -

copy

resented, with ~~all~~ the many problems attendant to the destruction of older walls and the partial filling of <sup>older</sup> rooms to make level areas on which to build additional rooms. Thus the material exposed at the upper level of occupation was carefully mapped, photographed, and otherwise recorded and then removed to expose the remains of earlier structures which had been partly destroyed to make room for the upper rooms. This ~~sort of~~ superposition ~~accured~~ with greater or less complexity in almost every part of the ruin, ~~making necessary most careful~~ <sup>necessitating precise</sup> mapping and recording ~~in order to avoid confusion.~~

~~It was found on completion of the excavations that the~~ village extended several hundred feet to the north of the ~~originally noted~~ area of the viga <sup>sockets?</sup> ~~seats, and that even in this~~ portion of the site the situation was complicated by problems of superposition. All of this material was eventually mapped, recorded and removed down to the bed rock on which the earlier rooms were built. It was possible to leave only the oldest level of occupation in situ.

Characteristic of most villages such as this ~~one whether~~ in the Chaco or in other parts of the southwest is a more or less extensive midden deposit. These ~~are~~ usually ~~exceedingly~~ important as they provide an opportunity for significant stratigraphic studies, principally of ceramic remains, which ~~frequently reveal many important facts about cultural loci and duration of occupations.~~ A ~~most diligent~~ search was made of every

There was no refuse mound.

↑ Gordon Division

possible area for the refuse heap which must have accompanied it. Extensive trenches were dug wherever there was the slightest possibility that refuse might have accumulated, but without success. Though unfortunate, this is perhaps not to be wondered at in view of the ~~talus top~~ location of the village. Most of the refuse was probably thrown down the talus slope to be almost <sup>and</sup> immediately washed away. This view is supported by the fact that many sherds were found <sup>on the surface of</sup> on this slope. <sup>These</sup> These were so disturbed by the redeposition caused by erosion on the steep slope and were spread so thin as to be useless for stratigraphic purposes. Nowhere was a deposit located of <sup>sufficient</sup> significant depth to make possible stratigraphic differentiation. Thus a very important source of archaeological information must be considered to be almost completely lacking at this site. Though unfortunate, this <sup>circumstance</sup> hiatus may be filled to some extent by information from other sources. Some of the rooms are built on thin deposits of refuse and ~~this in relation to the material from the superimposed rooms is somewhat significant.~~

What?

In general this particular site, although it was decidedly not prolific from the point of view of artifacts and other minor antiquities, served as an excellent demonstration of archaeological field methods as they are used in the southwest. <sup>h.c.</sup> The superimposed rooms made an excellent study in structural stratigraphy, ~~and there was ample opportunity to illustrate~~

T. work!  
Must not  
drag.

~~most of the current means of dealing with these problems.~~

The difficulties involved in writing field notes under somewhat complicated conditions proved very stimulating to most of the students and the results which they achieved added additional proof of the fact so well pointed out in earlier field seasons that comparatively inexperienced students, if properly supervised, can recover significant archaeological data, in actual excavation of pueblo ruins while they are being taught to cope with the more difficult phases of such excavations.

*Bragging isn't nice!  
Patel  
Jua  
RMB*

PART V - No. 5

Description of The Development of Casa Sombreada

Sub 1:

The Situation

BC-52 ← Gorda Luvian

The cliff against which Casa Sombreada is built is a somewhat irregular vertical escarpment about forty-five feet in height, ~~composed of the Onacra Sandstone.~~ The vertical plane of its surface is <sup>irregularly</sup> oriented about thirty degrees east of north, ~~on the average,~~ although it is very irregular. Large cracks and wide crevices deeply dissect it into a series of massive blocks, made more irregular by <sup>the falling out of</sup> large sections which have fallen out in the remote past. The area is one which suggests the danger of falling fragments.

The area directly below that portion of the cliff where the first viga <sup>is date profile ovalis</sup> ~~beats~~ were noted is composed of the topmost portion of the Allison member, <sup>consists</sup> here consisting principally of shale interspersed with large lenses of sandstone. ~~Here~~ there was ~~apparently~~ originally a substantially level shale ledge which sloped only gradually in the general direction of the talus. This area was approximately thirty feet long and extended about nine feet out from the cliff, <sup>where</sup> here it began to slope abruptly at an angle of about thirty degrees, ~~with horizontal and extend-~~ ~~ed approximately at this angle the full length of the talus~~ slope.

De Long's 1872

Jacko = Gorda Luvian

Immediately to the south the steep talus approaches the surface of the cliff much more closely, offering little opportunity for extensive building in this direction. To the north ~~for a distance of somewhat over two hundred feet~~ the situation is somewhat better. Here the talus was probably much lower at the time of the original building, a ~~large and comparatively flat~~ <sup>gradually</sup> area some ninety feet wide being available. At the base of the cliff in this section projects a comparatively flat ledge of shale varying from three feet to ten feet in width. The walls of some of the rooms were <sup>supported by?</sup> partly anchored <sup>I don't think this is the right word P.R.</sup> to this excellent foundation.

THE MASONRY

Casa Sombreada was constructed entirely of fragments of the Chacra Sandstone, ~~of which its supporting cliff is formed.~~ Its talus top situation is an excellent one from the point of view of availability of material for in this vicinity as almost everywhere in Chaco Canyon the talus is composed largely of broken fragments of stone which could easily be converted into adequate building material. Much of the upper portion of the shale stratum in this vicinity is interspersed with large lenses of sandstone which have weathered out and could have been easily separated into building stone of a sort. This sandstone, however, is not the best type of building stone. It can be broken into tabular sections only with difficulty and the in-

*Is there a definite instance of this? Also, from a geological point of view I think those aren't lenses.*  
*Peter*

habitants apparently in many cases did not consider it worth the not inconsiderable trouble required to shape it into perfect building blocks. Thus many irregular blocks were used which were not only difficult to lay up, but which frequently required much spalling or a disproportionate amount of mortar. Many of the building stones were, however, ~~at the cost of no little labor,~~ <sup>laid</sup> worked into a rather regular configuration ~~capable of producing~~ <sup>forming</sup> very passable coursed masonry. There is little or no evidence that pieces were ground to shape as frequently occurs in certain types of masonry in the great pueblos. Many pieces ~~seem to have been used~~ with little <sup>was used</sup> alteration principally in uncoursed or vaguely coursed walls with much spalling. Spalls were almost entirely small pieces of flat sandstone and were frequently very carefully placed to fill in all the space between large stones to produce a reasonably smooth <sup>f.w.</sup> surface. Very rarely potsherds were used as spalls.

Walls were entirely of the simple uncoursed type, unless the several walls about the Kiva II Complex, the space between which was filled sand and rubble, could be considered cored masonry of a sort. They were usually composed of what might be considered to be two very closely interlocking surfaces. That is; walls which were intended to be exposed on both surfaces, were usually built by selecting building stones which presented a large, flat, lateral surface. This was

*cored masonry  
Point 1+2  
contradict. 2 is  
right)  
P.R.*

*As a matter of fact, this includes 99 44/100 % of them, doesn't it, P.R.*

*copy*

*I don't think this is right. As I recall, Rms 1, 2 & 3 had double facings, and in fact most walls of the S<sub>2</sub> of the ruin. An uncoursed wall is one where each stone serves as a header, that is, forms a part of both wall facings. I grant that the occurrence of simple masonry is wide, but I don't think it was over 50%  
P.R.*

All in all, I think you should  
to survey Hawley; Judd et al. See State  
your own walls in their terms as far as possible,  
then discuss variation. This simple, untechnical description

has been done many times.  
P.R.

placed in the surface of the wall while other irregular sur-  
faces faced on the interior. Then another stone was so placed  
so that its best lateral surface faced the opposite wall sur-  
face and its irregular portions filled in the irregularities be-  
tween two or more of the stones faced the other way. Thus the  
characteristic wall might be said to be one built of two inter-  
locking series of facing stones. These stones did not fit to-  
gether exactly and as a result extensive spalling was very fre-  
quently resorted to in order to achieve to reasonably plane  
surfaces which could be easily plastered. When walls were in-  
tended to be exposed only on one side, they seem usually to  
have been faced only on that side, the other being left quite  
irregular. There are, of course multifold variations of this  
technique, although in general the principle of interlocking  
faces might be said to be characteristic of a goodly portion  
of this masonry.

copy

There is an enormous variation in the size of the  
building stones used. They range from small spalls only an  
inch or two in diameter to enormous blocks weighing several  
hundred pounds. The average size of the building stones used  
in this village is probably about a foot or slightly more in  
length, five or six inches in thickness, and eight or nine in-  
ches in breadth. walls vary in thickness from six inches to  
over two feet, the thickness being based on the proposed

...? explain these  
... this was  
... at CK-14  
P.R.

was 7-4-1, as Dracoll  
P.R.

height of the wall and the amount of strain to be placed upon it. Adjoining and abutting walls were very rarely held together by binders, and these were frequently so erratically placed as to seem almost unintentional. with all remarkably few walls seem to have separated at adjoining and abutting joints as might be expected. ~~This may have been due to some extent to the excellent foundations on which most of the pueblo's walls were placed.~~ Most of the early walls ~~constructed here~~ were built <sup>directly up</sup> at least in part on the living rock, ~~it being suggested that some little excavation had occasionally to be effected to make this possible.~~ In general, ~~when~~ later rooms were superimposed over the razed remains of earlier ones so that this excellent foundation was not lost. It is probably this factor, ~~whether it be a result of accident or intent,~~ that permitted the construction of the enormous weight of superimposed rooms over such a comparatively restricted foundation area suggested by the viga seats pecked into the cliff above the Kiva II complex.

This should show on your map. If so, don't need text. P.R.

Delimit point.

The superficie of the walls presented some little diversity. For purposed of discussion the masonry at this village has been divided into five different classes according to the appearance of its surface. These categories cannot be considered to represent definite typological <sup>subdivisions</sup> differentiations. The divisions grade into one another so imperceptibly that they represent little more than norms. Although the problem of these various surface

Up to here, the discussion is pretty popular, and in my mind doesn't contribute much. I'd cut it to a page, especially emphasizing the points checked in red.  
P.R.



Figure 3



4



types was carefully considered from the stratigraphic point of view with regard to superposition, no differentiation through time could be noted. It seems that almost all of these types tend to have been used throughout the entire occupation of the village. Surface typology seems to have been so unimportant to these people that on occasion walls were noted which were composed in various areas of several of these masonry types. In certain places the situation suggests that various sections of a single wall might have been built simultaneously by <sup>independent</sup> several persons, each of which asserted his own individuality. Nevertheless these various type designations form a convenient means of describing the superficial appearance of the various walls in the village. Principally with this end in view they are described below. The types are illustrated in Figure ~~1~~. 2

*P.S. if you must state which courses what. P.E.*

TYPE I.

This is a variety of uncoursed masonry made of irregular blocks the exposed surface of which varies greatly in size. They range from small stones not over four inches in <sup>(which)</sup> diameter to great blocks up to two feet in diameter. The average exposed surface was about eight or nine inches in diameter. The irregularities of <sup>exposed faces of</sup> the building stones necessitated large interstices between the flat facets which formed the surface of the wall. These gaps were carefully filled with flat sandstone spalls from

an inch to one half inch in thickness and up to four inches in length, according to the size and contour of the gap to be filled.

~~These were carefully laid horizontally and placed close together with a minimum amount of mortar.~~ *not in comparison to some of the CR stuff* All of the gaps were filled with

these spalls until the interstices were brought out into substantially the same plane as the stones. The finished surface of the wall was quite smooth and regular. This type of surface seems to have been characteristically covered with plaster. *Went they all?* It appears to have been used only on surfaces which were intended to be exposed.

#### TYPE II.

This type of surface is very similar to Type I with the exception that it is composed principally of well shaped blocks which present regular rectangular surfaces. It is regularly coursed and relatively less area is covered by spalling. There is also much less variation in the size of the stones used. The average size of the exposed surfaces is about one foot long by four or five inches high. Spalling here is also flat pieces of sandstone horizontally laid. The average size is somewhat smaller than those in Type I. They are laid in a minimum amount of mortar. The finished surface of the wall is smooth and regular and when excavated in some cases still bore its plaster covering. It also seems to have been used only where a surface was intended to be exposed.

TYPE III.

This type of surface is heterogeneous and haphazard, <sup>and</sup> *let without spalls?* appearing. It is vaguely coursed in certain spots, but the coursing does not carry through. Most of the blocks are vaguely rectangular, but they vary so greatly in size that full advantage could not be taken of their regularity. The stones vary in size from small ones four or five inches long and two or three inches thick to much larger similar blocks up to two feet long, the average length being about one foot. Although the irregularities would have made it desirable, spalling was not used to any great extent in this type of surface. It never appears in the stylized horizontal configuration characteristic of Types I and II. Interstices between rocks are filled principally with adobe. The surface presented is not nearly so regular as that of the two types previously described. This type of surfacing seems to have been used on exposed walls and to have been characteristically covered with plaster.

TYPE IV.

This type of surfacing is a very irregular one which seems to have been used principally in <sup>foundations or</sup> situations where it was proposed to cover it with dirt, such as the outside of the inner wall of a kiva. It therefore represents a treatment accorded the reverse side of walls which might be carefully faced on the obverse. Characteristically the building stones which are faced the other way protrude irregularly and at odd angles. The worst

*I wouldn't include the outside of a single facing (as kiva) in a classif, no one else has, and how could you compare it?*  
P.L.

of the interstices are irregularly filled with adobe carelessly daubed on. Small irregular sandstone spalls were then imbedded in this, not entirely horizontally, but at all angles. The resulting surface is very irregular. It does not appear to have been covered with plaster. (It wasn't, ever)

*This char. of rough surfaces.*

TYPE V.

This kind of wall is made of very large and heavy irregular stones some of which are as large as four feet long and weigh several hundred pounds. Most of the stones are long in proportion to their thickness and the arrangement is vaguely coursed. It is constructed entirely without mortar or extensive spalling. This sort of construction seems to have been used only for low, rough walls used to form terraces to be used as foundations for other structures. It is unique at this site in being a dry wall.

copy

*Rec: To be frank I think this reaction is to popular - too vague. I should be written in terms of the types, etc. You can use some specific not, for instance, fit in with the 13.50 on 5' profers, and I think it should. In other words, in terms of what has gone before, what has 13.52 got. Also, I think your map should show the distribution of each one of your five types.*

*How about the stratigraphy of these types?*

maybe this is a trolley line (on trolley #)

PART V. No. 3. Sub-3

DEVELOPMENT OF THE EARLIER PHASE OF OCCUPATION

The Kiva II Complex

The area directly below the numerous viga seats and and petroglyphs was composed of the topmost portion of the Allison member, here consisting principally of shale. Here was a substantially level area which sloped only slightly in the direction of the talus. It was about thirty feet long and extended about nine feet out from the edge of the cliff where it began to slope sharply at an angle of about thirty degrees to be covered at a lower level by the talus slope. At least the first fifteen feet of this slope either consisted of the bare shale ledge at the time the first building was done here or it had to be cleared of debris to expose the rock, ~~for the walls of the first structures erected on this site were fixed here to the living rock.~~ (The talus)

copy

The structure situated in the area just described was a small kiva (Kiva II), partly excavated into the shale, its floor being about seven feet below the level part of the ledge, and centered about twenty-five feet from the edge of the cliff. (See Figures ( ) and ( )). Its west side was excavated into the soft shale ledge while the <sup>west</sup> side was built directly upon the sloping surface. ~~It and its associated structures presented a rather complicated construction sequence, which will be developed as follows:~~

After an area reasonably level in its excavated western portion and composed of the sloping surface of the ledge to

*As before,  
the outside really doesn't count <sup>30</sup> here.  
Why not?*

*2 sentences  
or 3*

the east somewhat under fifteen feet in diameter had been achieved, a circular stone wall was constructed upon it. This averaged 1.5 feet in thickness at the base and at a height of 5.5 feet it abruptly thinned to .7 feet in thickness, at least on the west side, the only place it was preserved. The west side remained about seven feet high while only about a foot remained on the east side which was seated on the slope about a foot below the excavated portion. After the wall had been at least partly completed, this lower eastern portion of the interior was filled in with shale and talus debris, to form a continuous level. This wall was faced with Type II masonry ~~on the inside and Type IV on the outside.~~ Its thinness, especially of the upper portions suggests that it was never intended to be exposed on both sides, but to be supported by ~~fill~~ fill on the outside, ~~which its flimsy construction certainly required.~~ About its inside was built another similar wall also faced on the inside with Type II masonry. It was 2.7 feet high and .7 feet thick and forms a banquette. *These are 2 separate walls?*

*copy*

The ventilator, which was a rectangular trench in the floor 5.9 feet long, 1.4 feet deep, and 1.3 feet wide, began somewhat east of the center of the floor and extended eastward through the wall to a point 2.5 feet outside the inner edge of the inner wall. It was faced with Type II masonry with a packed shale and adobe bottom. The top stones of this trench wall lay .3 feet below the level of the finished floor and on it were impress-

ions in adobe of a number of cylindrical cross members which suggested that at least a part of this trench had been covered with small sticks averaging .1 foot in diameter over which extended the hard packed adobe floor. Just how this ventilator was covered as it passed through the wall was not determined for this portion was not extant. Neither was any portion preserved of the vertical shaft usually associated with the outer end of these trenches.

Directly <sup>near</sup> opposite the inner end of the trench was a rectangular stone fire place the sides and bottom of which were composed of stone slabs. It was exactly the same width as the trench and in line with it and was 1.4 feet in east-west diameter. Its bottom was somewhat irregular, but the depth averaged .8 feet. The stone slab sides were placed vertically and projected .05 feet above the finished floor. It was filled with white ash and finely divided charcoal. The floor was of smooth, well packed adobe and the walls were plastered at least four times. Some interval between plasterings was indicated as each layer was blackened noticeably. The completed kiva was 11.0 feet in diameter below the banquette and was not ~~quite~~ <sup>stat. E?</sup> perfectly circular.

It was surrounded by a peculiar complex of walls and the intervening spaces filled with rubble as if to counterfeit a subterranean situation as well as to provide additional support. Centered directly behind at the edge of the level portion of the shale ledge a wall was built parallel to the face of the cliff

The unusual circumstance here was the ~~roof~~ single faced kiva wall in conjunction with artificial fill.  
P.P.

copy

Soba up Williams. What good are the types if several appear in one wall facing. A type must also imply structural complex, only 1 to a wall. PR.

and about eight and one half feet from it. It was 22.5 feet long, 1.2 feet thick, and remained to a height of only 1.7 feet, being faced on both sides with Type I masonry. It was built directly on the living rock. From the ends of this was built a "U" shaped wall which enclosed the kiva, the whole encircling member being "D" shaped. (See Figure (3)). Its more westerly portions rested on the living rock while to the east the arc lay on talus debris. Its western parts were standing about five feet high, the remains being progressively lower down the slope until at its most easterly extension, only about a foot and a half of it remained. Thickness was irregular, but averaged about one foot. The outside of this wall demonstrated several masonry types. The south side was faced with Type I masonry, which gradually changed to Type III on the north, while a section of the lower portion of the east side was of Type V. The arc of the encircling wall was large enough to clear the inner wall of the kiva by 5.0 feet. The vertical shaft of the ventelator must have extended upward somewhere between these two walls.

Drunk!  
Mutton's  
regards for  
a change!

copy

The large "D" shaped enclosure will henceforth be designated as the Kiva II Complex. The next step in its development was the partitioning off of a rectangular area in its eastern portion by an interior wall parallel to the western wall and about seven feet to the east of it. This wall averaged 1.2 feet in thickness and remained about as high as the outer wall. It was

faced on both sides with Type I masonry. Later another "U" shaped wall was built which encircled the kiva between the inner and outer walls and abutting the wall just described at right angles near its southern end. It averaged 1.2 feet in thickness and was faced on both sides with Type IV masonry. It was entirely contained within the rubble and probably never was very high,

*How do you figure this?*

only an average of 2.5 feet of it remaining. Its purpose is ~~problematical~~ <sup>problematical</sup> doubtful. It seemed intended to offer additional support to the Kiva II Complex, ~~a support which was hardly needed.~~ Its northern end abutted ~~another similar short wall at right angles to it~~ which extended from the outer wall to a point roughly tangent to the west side of the inner kiva wall. On the other side, slightly off-set from the point of abutment the wall was continued to abutt the east wall of the western rectangular area.

*copy*

*obvious from map. who looks at map more than me?*

Still another wall was constructed here, apparently for additional kiva support. It extended from a point roughly tangent to the south pole of the inner kiva wall to the west to abutt the east wall of the western rectangular area. It was 1.8 feet thick and was ~~faced on both sides with Type IV masonry.~~ ~~It remained~~ about four feet high. (See Figure ( ) ). The spaces between these surrounding walls were filled with sand and talus debris containing practically no refuse. Thus the exposed eastern side of the kiva was provided with a combined wall thickness of 7.2 feet, which approximated a subterranean situation.

- West ?

The rectangular area which formed the eastern side of the Kiva II Complex was filled with clean sand and talus debris to a level about six feet above the floor of the kiva and further subdivided. An east-west wall .9 feet thick ~~and~~ <sup>before being</sup> ~~faced with~~ Type III masonry divided it into two smaller areas. The most southerly of these averaged 8.5 feet in length and was designated Room 7. The northern section was further subdivided by a north-south wall 1.0 feet in thickness ~~and was also faced~~ <sup>it</sup> with Type III masonry, which separated it into two narrow areas, the most westerly of which was 3.1 feet wide and 11.4 feet long, and was designated Room 16. The east side was again subdivided by an east-west wall, <sup>-1</sup> 9 feet thick and faced with Type III masonry. The northern subdivision was designated Room 17 and was 3.9 feet long and 2.5 feet wide. The southern, Room 18, was 2.5 feet wide and 7.1 feet long. (See Figure ( ) ).

Room 7: A smooth, hard packed adobe floor was constructed over the sub-room fill, and the walls were smoothly plastered. Near the center of the floor was evidence of a small fire, but no definite fire place. Later the floor was covered with .4 feet of sand and refuse, and a second floor was constructed at least part of which was made of stone slabs set in adobe mortar. This was the only floor of its kind in the village and is rather unusual in the Chaco area. There was no

evidence of a fire at this level. The lack of a door suggests a roof entrance.

Room 16: A similar adobe floor was constructed here at about the same level as Room 7, and the walls were plastered. There may have been an <sup>western?</sup> eastern door which opened toward the cliff. The wall was too badly destroyed to show any portion of the door, but its presence is suggested by a stone step raised .4 feet above the floor, <sup>It is located western?</sup> against the eastern wall about two thirds of the distance from the southern end. It was made of two slabs plastered together and was 2.2 feet long and 1.0 feet wide. ~~The room contained no fire place or other floor features.~~

Rooms 17 and 18: These were so small as to be little more than bins. They had similar adobe floors on about the same level as the others and the walls were plastered. They contained no additional features. There were no doors and it is possible that these interior walls may not have extended all the way to the roof.

THE NORTHERN ROOMS

Just to the north of the Kiva II Complex was a large level and much lower area. ~~At a depth~~ slightly below the floor level of Kiva II a sandstone ledge projected a short distance to the north from under the Kiva II Complex, being several feet higher than the northern plaza. An additional wall was built upon this ledge, <sup>extending from</sup> obliquely, ~~against~~ the north side of the Kiva II Complex ~~to extend~~ north-westerly to the cliff. It enclosed an area about twelve feet in east-west extent and a little more than five feet in maximum breadth. The outside of the wall was convex ~~and in later times~~ (at least) bulged noticeably. It was faced ~~on both sides~~ with Type II masonry, <sup>this</sup> average thickness of .7 feet being rather thin considering its length and position. ~~This fact becomes important~~ in the following discussion. The area enclosed by this wall, which was ~~preserved~~ about four feet high was designated Room 3.

Room 3: Enough refuse was placed in the bottom of this room to cover the sandstone ledge and a smooth adobe floor was constructed. The walls had been plastered three times. There was no fire place or other floor feature. The lack of a door suggests a roof entrance.

~~Another Kiva~~ (Kiva III) also seems to have been built early in the occupation of the village. This one was in part naturally subterranean. It was centered 24.5 feet directly to the north of Kiva II and 11 feet east of the cliff. It's


western half lay in a lower portion of the ledge which also supported the northern wall of Room 3. This portion of the ledge breaks sharply off a little over eleven feet east of the cliff so the western half of the kiva floor rested on the talus debris. There was excavation into the side of the ledge to provide a level floor. A level area a little over twelve feet in diameter and several feet below the surrounding plaza was first prepared, partly by excavation into the ledge and partly into the talus. The ledge seems to have been reduced principally by breaking off the friable sandstone and shale, by heavy blows.

*Ravine*

About two feet above this floor a bench was excavated into the side walls again partly into the ledge, something under a foot in width. Upon this a circular wall averaging .9 feet in thickness was constructed and faced ~~on the inside~~ with Type II masonry. It was preserved about two feet high, and was nearly circular with an inside diameter of 11.5 feet. After the completion of this wall another similar one was constructed against it on the inside. It was .8 feet thick and at a height of 2.9 feet above the floor was smoothly finished off providing a banquette similar to that of Kiva II. The interior diameter of the kiva below the banquette was 10.7 feet. The stone and debris foundation was covered with a smooth hard packed floor which was formed on the western side, by wetting the living shale of the ledge, which <sup>may have</sup> disintegrated readily when wet, and pounding or rubbing

it to a smooth, hard surface which was badly cracked when found. A few vestiges of plaster adhered to the walls.

The edge of the stone ledge which formed part of the floor extended to within 3.5 feet of the eastern wall. The ventilator trench extended from this point about twenty degrees south of east for a distance of 7.7 feet or 3.2 feet outside the outer wall. It was not floored, but was smoothly walled with masonry identical with that of the outer wall. The top of the ventilator trench wall lay .8 feet below the floor level and on the tops of the highest stones were impressions in adobe of transverse cylindrical vigas which averaged .2 feet in diameter. ~~There were ten~~ of these which roofed the passage from the inside of the inner wall to a point .9 feet from its inner end. The adobe floor of the kiva seems to have extended ~~uninterruptedly~~ over this passage with the exception of the rectangular opening at the western end. After it had passed through the walls, the passage was roofed with stone slabs to a point .9 feet from its eastern end where a rectangular vertical shaft of masonry, faced only on the inside, extended upward for a distance 4.2 feet above the floor of the passage. This masonry was apparently arranged as the lining of a pit/ for, though faced on the inside, it was irregular on the outside and very unstable after the surrounding dirt had been removed from it. It looked as though it



might have originally been higher than when found. Strangely enough this kiva had no fire place. The area where the fire place ordinarily would have been was in this case formed of solid rock, which presented some obstacle to the construction of the usual type of slab lined, excavated fire pit. There were not burned areas on the floor, but there was a certain amount of charcoal scattered through the fill on and near the floor. There may have been some sort of <sup>super</sup> floor fire place here which had been removed or destroyed. The plaza level about the kiva was probably several feet above its floor.

Probably the next structures to be built were two rooms directly to the north of Kiva III which were designated Rooms 45 and 46. (See Figure (3) ). The ledge into which Kiva III was excavated <sup>extended</sup> was more than one hundred feet to the north along the base of the cliff at an approximately constant level. On the average it extended out about ten feet from the edge of the cliff. At the time of the construction of these two rooms the area directly in front of this ledge as well as a thin lense on the ledge itself was covered with refuse. This suggests that these two rooms were not constructed until some time after the initial occupation. The area was a substantially level one and over this foundation a wall was abutted against the outside wall of Kiva III on the north side ~~somewhat east of the center~~ and extended in a direction ~~about thirty degrees east of north or~~ substantially parallel to the side of the cliff

~~\_\_\_\_\_~~  
 ok yes, I see!

for a distance of 22.2 feet, where it turned westward at right angles to extend 8.5 feet to meet the cliff. This wall averaged 1.0 feet thick, was well constructed, and was faced ~~on both sides~~ with Type II masonry, though with stones somewhat larger than usual. At the time of excavation it averaged 1.8 feet high and enclosed a rectangular area.

*MS confused?*

At a point 8.6 feet south of the northern end of this wall a transverse wall was built extending from the cliff to the east wall which enclosed Room 46. It averaged 1.0 feet in thickness and was preserved slightly higher than the outside wall, being faced with Type II masonry. South of this wall 8.0 feet another parallel transverse wall was built. It was identical in thickness and construction with the other and enclosed Room 45.

*This is very confusing*

Room 45: Enough refuse was placed within the enclosing walls to provide a level floor which was made of hard packed adobe. The walls were plastered twice. Slightly east of the center of the floor was a <sup>hemispherical</sup> hemispherical adobe plastered fire place. It averaged 1.4 feet in diameter, and .7 feet deep. Its bottom was covered with a small amount of ash and charcoal. There was no door. A crack in the western cliff wall was filled with horizontally placed stone slab spalls and adobe apparently to be plastered over.

*MS. feet this in?*

Room 46: This was similar to Room 45 except that it had no fire place. The floor was smooth packed adobe and the walls were plastered. There was no door.

The area to the north of Room 45 and to the west of Kiva III (Room 38) was not intended to be a room, but was filled with shale and talus debris to <sup>increase level plaza space</sup> provide Kiva III with a more subterranean character.

Extending eastward from Room 45 in a line with its south wall was a rough line of stones 12.2 feet long. It was not associated with a floor level and might possibly have been a wall foundation.

These are the only structures which can definitely be ascribed to the earlier phase of the occupation. Some of the non-contiguous structures which will be described later may also date from this period, but ~~this cannot be proved~~. Figure (1) is a hypothetical reconstruction of the village as it might have appeared at this time. It is based on the evidence described above. Superstructures, roof openings and similar features are entirely hypothetical and are based on the appearance of Chaco Canyon structures elsewhere. It is not presented as a reconstruction accurate in all details, but merely to give a general impression of the appearance of Casa Sombreada at this period in its development. ~~The view is from the top of the cliff somewhat to the north of the village.~~

PART V. No. 3, Sub. 4THE DEVELOPMENT OF THE LATER PHASE OF OCCUPATION

The depositional situation here does not suggest that any great length of time elapsed between the two phases of occupation or that they can be considered to belong to ~~separate cultural~~ <sup>represent culturally distinct phases</sup> ~~al~~ proveniences. Rather does the occupation appear to have been continuous. Similar to the situation at many other Chaco sites, the buildings ~~merely seem to have become old and unstable, or inadequate to house the expanding village and to have been~~ <sup>were</sup> ~~torn~~ down, partly filled up, and new rooms constructed upon them, frequently using portions of the old walls for foundations, and probably reusing most of the old material. However, rather than merely tearing down rooms and adding new ones as the occasion required, as occurs so frequently in pueblo villages, the evidence here seems to suggest that Casa Combreada underwent a fairly general reorganization within a fairly short period of time, <sup>conceivably</sup> or perhaps at two somewhat separated periods.

Don't "conclude" here. This complicated. P.R.

I'm not so

sure.

SUPERIMPOSITION ABOVE THE KIVA II COMPLEX

The first of this reconstruction probably centered about the Kiva II complex. It may have been motivated principally by the desire to secure a more stable foundation for the construction of a multi-storied structure against the side of the cliff. At any rate Kiva II was filled up to a depth of 7.3

Then why found on old walls

P.R.

feet with a mixture of refuse, sand, building stones, and talus debris and its circular inner wall torn down to <sup>slayer</sup> ~~this~~ level. The ~~strangely~~ intersecting complex of walls within the core about the kiva were also similarly destroyed, if, indeed, they ever extended so high and the whole eastern "D" shaped portion of the Kiva II Complex within the outer encircling wall, reduced to a common level a little over a foot above this lower floor level of Room 7, and 16-18 to the west. The separating walls of these rooms, as well as the straight western portion of the outer encircling wall of the Kiva II Complex, were also raised to an average height of about one foot, or slightly below the new level in the eastern part of the structure. The straight western wall of the Kiva II Complex was then rebuilt with a wall of an average thickness of 1.2 feet <sup>T.S.</sup> ~~and which~~ was faced ~~on both~~ ~~sides~~ with Type I masonry. At the time of excavation it was preserved to a height of about two feet. It probably was intended to follow the foundation provided by the old wall, but actually it was offset slightly, being about .1 foot further west. The fact that this wall was torn down and then rebuilt suggests that it might have become unstable and have been one of the important factors on which the necessity for the reconstruction of this wall probably included further additions to the whole outer wall of the Kiva II Complex. There is no evidence of this, however, this portion of the structure hav-

How high

84

Can't you be more specific?

ing been completely destroyed by post-occupation erosion. It is thought that this wall must have been built higher to provide support for the additional building done within the outer wall of the Kiva II complex. ~~This will be described presently.~~

After the reconstruction of the western wall the rectangular western part of the structure was filled up to approximately the same level as that on the east side. This brought it to approximately the top of the remaining portion of the north wall of Room 7.

There was undoubtedly also additional building done on the top of the wall which formed the east side of the western rectangular area of the structure to provide for the additional rooms constructed here, but only the bottom portion of this wall was preserved at the time of excavation and this could not be determined.

The interior of the eastern "D" shaped portion of the structure was then leveled off and in it constructed a probably circular room, apparently a kiva. (Kiva I). It consisted of a circular wall of masonry which varied from 1.0 feet to 1.6 feet in thickness and enclosed an area 11.2 feet in diameter. It was faced on the inside with Type III masonry and on the outside with a vague sort of Type IV. Within it had been constructed a hard packed smooth floor, which was very badly cracked at the time of excavation. The interior walls had been smoothly plastered. Practically all of the eastern half of this room, together with its floor had been destroyed by post-occupation erosion, the

I can't find this out - why is this wall so good then important

what structure

What room # 5

2 ind?

walls being preserved on the west to a maximum height of about 1.6 feet. This room was centered about on the east-west axis of the enclosing structure and its western side abutted the straight east wall of the rectangular portion of the structure in such a manner that its surface was tangent to the interior surface of the curved wall rather than the exterior. (See Figure ( ) ).

*The map shows the area, who looks at a map more than me, and then only at a glance? Heck!*

The assumption that this room was a Kiva is based on somewhat doubtful evidence. It was so poorly preserved that had distinctive kiva features actually been present, they would have occupied areas which had been eroded away. The only interior feature was a rectangular slab lined fire pit, ~~without a bottom~~. It was 1.2 feet by 1.1 feet with a depth of 1.0 foot, and was partly filled with ash and charcoal when found. As regards other kiva features; there was not enough of the wall preserved to show a banquette, *I recall there was no banquette.* and the ventilator and its shaft, *shaft?* occupied areas which had been eroded away. The fire pit could as well have belonged to a secular room as a kiva. The assumption that it was a kiva is therefore based, *simply* on the fact of its shape ~~and the lack of any specifically non-kiva features.~~

The area between the outer encircling wall of the Kiva II Complex and this inner curculat wall, and above the level of the bottom of the latter, was filled with refuse, sand, and talus debris, apparently to provide a core and possibly more subter-

Army key.

ranean <sup>set</sup> ~~situation~~, which fact further suggests the kiva hypothesis.

The core area was designated Room 10.

The rectangular area to the ~~east~~ <sup>west</sup> of the kiva was divided into two rooms by a transverse east-west wall, which was probably intended to extend directly over the remains of the old northern wall of Room 7, but actually was offset slightly to the north. It was solidly cased on the older wall, however, and was about 1.2 feet in thickness, being faced ~~on both sides~~ with Type III masonry. It remained to a height of 1.5 feet. This divided the area into two rooms which were about the same size as those below. The southern was designated Room 2 and the northern Room 4. *which* *was covered*

Rooms 2 and 4: Hard packed adobe floors were constructed in both of these and the walls were plastered. ~~There were no~~ floor features or doors though the walls were preserved high enough to be certain that the latter were never present.

The area between the Kiva II Complex and the cliff was closed to the south by a short wall 1.1 feet thick ~~and faced with~~ Type III masonry. It was preserved to a height of 1.5 feet. Over the shale ledge ~~here~~ had been deposited a thin layer of refuse probably during the previous occupation. This enclosed area was then by an east-west wall about nine feet north of its south end, which was about a foot in thickness and was faced with Type III masonry. The southern of the two areas was designated Room 19, and the northern Room 15.

If this isn't double fall what is it

*This is why  
 Bald. Why don't you put it in a 24 HR with two nails  
 under her dress the railroad crossing P.D.  
 this wasn't a complete sentence in the orig. m.t. Don't tell me that is why you're getting bald.  
 E.H. Blum*

There was one viga seat in the cliff which probably supported part of the roofs of these rooms. (See Figure ( ), X89XY92). It was about .9 feet in diameter and was pecked ~~smoothly into the cliff~~ to a depth of .2 feet. This viga was centered about eight feet above the lower floors of these rooms. But, as this particular viga was over a part of Room 15 the floor of which was formed by a raised ledge somewhat above the general level of the adobe floor, it is possible that the other parts of the roof may not have been so high. Other vigas could have been fitted into convenient cracks in the rocks and a part of the weight might have been supported by cantilevers from Rooms 2 and 4. The viga seat indicated that the north wall of Room 15 lay on the ledge some feet to the north of the north side of the Kiva II Complex. *T. Linn*

Room 15: Enough sand and refuse was placed in the bottom of the room to provide a level floor and a smooth, hard packed adobe floor was constructed. The walls were plastered. The western wall which was formed of the cliff was irregular and had several large cracks. These were filled with odd stones and a concave stone and adobe banquette was constructed which was formed of the cliff was irregular and had several large chcracks. These were filled with odd stones and a concave stone and adobe banquette was constructed which was 3.7 feet high, with a flat top which was about a foot in maximum width. This was smoothly plastered seferal times. Later a second floor was

*Bad!*

constructed .3 feet above the first, the intervening space being filled with sand and refuse. Like the lower floor this had no fire place. The western banquette was then discontinued, a wall .9 feet thick and faced on the east with Type III masonry being built with sand and talus debris, (See Figure ( ) ), This wall was also plastered.

Room 19: A similar adobe floor was constructed here at about the same level as the lower floor in Room 15, and the walls were plastered. Later another floor was constructed .3 feet above the first, the intervening space being filled with sand and refuse. In the south-east corner was a rectangular fire pit lined on four sides with thick stone slabs. It did not have a slab on the bottom, and its top was approximately level with the floor. It was 2.6 feet long by 2.2 feet wide and .8 feet deep. Charcoal and ash about half filled it. *(You're deteriorating. Must be liquor!)*

If the construction of Kiva I was like that of Kiva II its roof and together with it the whole of the eastern surrounding wall probably extended to about the same height as the roofs of Rooms 2, 4, 15, and 19. ~~This is speculation suggested by the foundation.~~ Later two more tiers of rooms were added to the rear of the Kiva II Complex ~~against the cliff~~, as shown by the rear of the wiga beats in the cliff. Before these superimposed rooms were built, it is probable that Rooms 2, 4, 15 and 19 were filled intentionally with talus debris and refuse to

provide a better foundation. The evidence of long occupation in the lower rooms ~~then~~ further suggests that the upper tiers may not have been constructed until some time after the beginning of the reconstruction of the Kiva II Complex.

This second tier extended over Rooms 15 and 19 at least and must have been <sup>about</sup> ~~at least~~ thirty feet long, like Room 15 extending some feet to the north of the Kiva II Complex. This area might well have been divided into three rooms, judging from the viga seats, (See Figure ( ) X18-X104xY71), which lay at a height of 6.5 feet above those of the story below. These consist of one circular hole at the northern end about .6 feet in diameter and .3 feet in depth, and a long horizontal groove divided into three sections <sup>separated</sup> separated by natural cracks in the cliff. The northern section is ~~a remarkable piece of work,~~ being very well pecked and averaging .5 feet wide and .4 feet deep by 8.2 feet long. The other ~~two~~ sections are ~~respectively~~ about the same length, but much shallower. Several projections were pecked off the cliff surface to smooth the cliff walls within the rooms. Within the central sections there were seven irregularly placed ~~pecked~~ ovoid depressions which varied from 1.0 to .5 feet in length. There were several radiating lines extending from the top ends of several of these. They may have supported small poles which extended across the room and on which things were hung. In the southern section is a quarter spherical, flat bottomed <sup>pitch</sup> <sub>b</sub>

go to hell!

about one foot in diameter. This may have been a viga support, ~~or have had some other purpose.~~ There were also many petroglyphs within these rooms which could ~~only~~ easily have been made while the floors were in place. (See Petroglyphs).

Above these rooms was constructed a third tier, apparently of similar length. The exact height is somewhat doubtful as the pattern of the viga seats is not ~~at all~~ clear. The height of the southern section is obvious for its roof was supported by a very large and deep groove. (See Figure 6) X17-X44xY55). This is about six feet above the viga groove below. It is a well pecked groove averaging .8 feet in width and .6 feet in depth by about nine feet in length. Further to the north the situation is not so clear. There is one shallow groove at about 4.5 feet long at X84-Y94xY52 which is 7.0 feet above the viga grooves below and a circular hole of .9 feet in diameter and .5 feet deep just below it. Four feet to the north of this hole there is another similar one pecked into a large crack. In this vicinity there are eleven much smaller holes and one small oblique groove which seem to be scattered about without much pattern. The general impression to be gained from these queerly placed holes is that the roof of the top story was about six feet above that of the story below. The apparent lack of a sturdy support in the central section is not inexplicable, There may have been no room there or, more likely, its roof was supported by the

9/14/52

Handwritten mark

It is put in all this description if you're gonna have illustrations

walls of the two lateral rooms. The cliff walls within these rooms were also covered with petroglyphs. (See Petroglyphs).

The queer combination of holes and grooves which made up the viga supports is difficult to explain. The odd locations of some supports suggests that rooms may have been rebuilt here several different times, each time differently located supports being used. Characteristically rooms such as these were roofed with a single heavy beam laid across the center supporting a number of smaller transverse elements, which were covered with other material, apparently principally with tules at this site judging from impressions found, and finally covered the adobe. The large circular holes may have supported these primary beams, while, in other cases, the smaller transverse elements may have been supported in the grooves.

Evidence of three stories against the cliff further suggests the one time existence of a second story above Rooms 2 and 4. Their support would almost certainly have been necessary for the support of the higher rooms to the west.

#### ROOMS TO THE SOUTH OF THE KIVA II COMPLEX

The ledge to the south of the Kiva II Complex was somewhat narrow and the first concern of the builders was to obtain a level surface. This was done by constructing a wall south from the Kiva II Complex parallel with the cliff and about fourteen and a half feet from it. It was 14.8 feet long and was

of Type V masonry, being very thick and heavy. Its top was slightly lower than the surface of the shale ledge near the cliff. About twenty-one feet to the south a number of large, irregular stones were pushed into position to enclose the areas behind the wall. Then the enclosed area was filled with shale and talus debris until it sloped only slightly. A closely placed line of large, irregular stones was then built about six feet west of the first wall, and the area behind them also filled with shale and debris. This provided a level space for rooms. This area was about three feet lower than the floor of Room 19. *(What do you call this area.)*

On this foundation two additional small rooms were built adjoining Room 19 to the south. These were probably storage rooms. At a distance of 7.5 feet from the south wall of Room 19 an east-west wall 3.4 feet long was built out from the cliff to turn southward at right angles and extend parallel with the cliff from a distance of 6.6 feet. About 1.6 feet further south another east-west wall 2.8 feet long finished the enclosure which was designated Room 9. These walls averaged .8 feet in thickness and were faced with Type III masonry. They were preserved about a foot in height. The space between Room 9 and Room 19 was then enclosed by a similar wall. It was designated Room 8.

Room 8: The walls were plastered on the inside and a smooth, hard packed adobe floor constructed. There was some slight evidence of a fire in the south-east corner. Near the north end of the east wall was a door. It was 1.3 feet wide and its sill .7 feet above the floor. The roof was principally formed of the overhanging cliff.

Room 9: This had similar plastered walls and smooth adobe floor. The door was 1.5 feet wide and was unusual in that its sill was at the floor level and the floor extended through it. The roof was also partly formed by the over hanging cliff.

ROOMS TO THE NORTH OF THE KIVA II COMPLEX

Throughout the occupation of the village Room 3 continued to be used. Its thin northern wall probably supported a part of the second and third story rooms above the Kiva II Complex, an additional weight it was not originally intended to support. After a time it began to bulge badly and was probably in imminent danger of bringing many of the superimposed rooms down with it. In order to avoid this it was necessary to brace it with a buttress on the outside. The buttress could not be placed upon Kiva III so it was necessary to dismantel this structure and fill <sup>the remainder of</sup> its interior with refuse. Across the level area thus formed a heavy buttressing wall was built at right angles to the bulging curved northern wall of Room 3. This was 9.6 feet long, 2.0 feet thick and was faced on both sides with Type I masonry. About four feet of it <sup>was</sup> ~~were~~ preserved.

Later a wall extending from the north end of this buttress to the cliff enclosed a vaguely rectangular area about sixteen feet in maximum length and 8.4 feet in width which was designated Room 37. This wall averaged 1.0 feet thick, was faced on both sides with Type III masonry, and was preserved about two and one half feet high.

Room 37 & Developments within it: The interior walls were plastered and a smooth adobe floor constructed. There was no fire place or door. Later the floor was covered with about .1 foot of adobe and refuse and a transverse wall built near the center from the south side about half way across the room. This was partly made of one large stone probably broken from the ledge nearby. The rest of the masonry was Type III and the wall was completely preserved 3.2 feet high and .7 feet thick. The western section was designated Room 35 and the eastern Room 36. (See Figure ( ), inset). Later a third floor was constructed about .1 foot higher and the transverse wall was continued with similar masonry higher and all the way across the room, dividing it into two distinct parts. The later addition was 1.0 foot thick, the earlier, thinner section being thickened with adobe. The western section was designated Room 11 and the eastern Room 13. Nowhere in this complex was there a fire pit or a door.

Can't find this on map.

An "L" shaped wall was constructed to the east of the butress from its northern end to the north wall of the Kiva II Complex. This enclosed an area 9.3 feet in an east-west extent by 9.9 feet in north-south extent. The wall was 1.3 feet thick and was constructed of Type III masonry. ~~It was designated Room 12.~~

Room 12: An adobe floor was constructed and the walls were plastered. There was no fire place and, although the walls were high enough to have shown it, there was no door.

There was additional building to the north of these structures. Just when this occurred is not clear, but it probably was subsequent to the rooms described. The walls of Rooms 45 and 46 were torn down to a height of about 1.8 feet and the interiors as well as the surrounding area filled with building stones, sand, talus debris, and a small amount of refuse. The whole area to the north for a distance of about sixty feet was reduced to a <sup>virtually</sup> substantially common level.

Directly upon the old foundations of Room 46 another <sup>room</sup> was built almost exactly the same size and with walls about the same thickness and faced with Type III masonry. They were preserved less than two feet high. This was designated Room 27. The area between it and Rooms 11 and 13 was enclosed by another wall 1.1 feet thick and faced with Type III masonry. This enclosed Room 30.

Room 27: The walls were plastered and the floor was smooth, hard packed adobe. There was no door, fire place or other room feature.

*a good description*

Room 30: This had similar plastered walls and adobe floor. The east wall had a door in its approximate center. It was 2.1 feet wide and its sill was .9 feet above the interior floor. Outside the door was a stone step set in adobe. It was 1.9 feet long, .9 feet wide and lay .6 feet below the sill. The plaza level outside the room was not clear.

About seven feet north of Room 27 another rectangular area 11.6 feet long from north to south and 13.4 feet from east to west was enclosed against the cliff by a wall 1.5 feet in average thickness and faced with Type I masonry. The western portion of this enclosure was a deep cavity under the overhanging cliff. A similar north-south wall, also of Type I masonry *segregated* divided off a rectangular section to the east 7.6 feet wide. The area to the east of this wall was designated Room 23 and that to the west Room 24.

Room 23: A smooth adobe floor was constructed and the walls were plastered. An ovoid fire pit ~~xxx~~ near the center of the floor was 1.8 feet long, .9 feet wide, and 1.2 feet deep. Its interior was neatly plastered and it contained ash and charcoal. This pit was dug into the shale ledge below, the tool marks being clearly visible on the soft shale. It appears to

have been dug with a blade a little over an inch wide which was slightly serrated on the end, perhaps a digging stick like the one found in Room 24. The room was later filled with .5 feet of refuse and another similar floor constructed which had no fire pit. <sup>Scratched</sup> ~~Incaised~~ in the plaster of the south wall were the drawings illustrated in Figure ( ). The east wall had a door near its south end which opened into Room 26. It was 1.9 feet wide and its sill was .5 feet above the upper floor. The west wall had a door near its north end which was a half "T" shaped structure, the only one in the village, though this type of door is common elsewhere in Chaco Canyon. Its sill was 1.9 feet above the upper floor and was 1.0 feet wide. At a height of .7 feet above the sill the south side was set back an additional .2 feet, forming a sort of ledge. *(So was the north side before it wore off see plates)*



Room 24: This lay principally under an overhanging ledge and needed little footing. Its interior walls were plastered and it had a smooth adobe floor at about the same level as the lower floor of Room 23. On the floor lay fragments of a mat made of ( ) which ~~looked as though it might~~ <sup>may</sup> once have hung in the doorway. (See Figure ( ) ).

Abutting the north-east corner of Room 23 another "L" shaped wall enclosed an irregular area against the cliff, <sup>about</sup> vaguely eleven feet in diameter. It was 1.0 feet thick and was faced with Type III masonry. A small semicircular cavity in the cliff

within this area was further partly partitioned off by another similar wall. The small cavity was designated Room 22 and the larger Room 21.

Room 21: The western portion of the floor was formed by the shale ledge over which enough refuse was deposited to make a level floor which was covered with hard packed adobe. The walls had been plastered several times. Near the center of the floor a square fire pit had been excavated into the ~~living~~ shale ledge and lined with sandstone slabs. Its top was level with the floor. Length was 1.1 feet, width .7 feet and depth .6 feet. Less than a foot of the eastern wall was preserved. ~~It might well have had a door.~~

Room 22: This was a small, <sup>artificially formed</sup> cavity the adobe floor of which was continuous with that of Room 21. The doorway was 1.1 feet wide and the wall plastered. This is one of the two doors <sup>sits at its sill at floor level.</sup> ~~in the village which was without a sill~~ and through which the floor extends continuously, the other being Room 9. This room needed little roofing as it was well protected by the cliff.

To the east of rooms 21 and 23 an irregular pentagonal area was enclosed by an additional wall. This area was 19.0 feet from north to south and 9.6 feet transversely, being the largest room in the village. The wall averaged about a foot in thickness and only the bottom row of stones were present. It was designated Room 26. Contiguous to the north was an addit-

ional small rectangular room against the cliff. It was about eleven feet long and six feet wide. Only a few of the lower stones were present. It was designated Room 20.

Room 20: This was almost completely eroded away. It had apparently had a packed adobe floor, portions of which were present. There was no fire place and the masonry type could not be determined.

Room-26: This room was almost completely destroyed also. It had had a packed adobe floor and may have had a central fire place. Only the bottom stones of its eastern wall were in place, too little to show a door had one been present.

The east wall of Rooms 26 and 27 were connected by a straight wall 1.0 feet thick. Only the bottom row of stones were still in position. It enclosed Room 25.

Room 25: The interior walls were plastered and an adobe floor constructed. There was no fire place nor was the east wall preserved high enough to show a door.

NON-CONTIGUOUS STRUCTURES AT CASA SOMBREADA

There were several structures which, because they lay apart from others, could not be definitely equated with either the earlier or the later phase of occupation.

Largest of these was Kiva IV, which was excavated into the talus directly in front of Rooms 27 and 44, being about twenty-one feet east of the cliff and nineteen feet north-east of the center of Kiva III. Its floor was approximately five feet below that of Kiva III. A circular excavation somewhat over fourteen and one half feet in diameter was first prepared. About its periphery about two and one half feet above the bottom a banquette like excavation was made a little over a foot wide. On this ledge a circular wall was seated, 1.0 foot thick and faced ~~on the inside~~ with Type III masonry. The remains reached a maximum height of 5.2 feet above the bottom of the excavation. The average interior diameter of the very nearly circular wall was 13.2 feet. After the completion of this wall, a second similar one of about the same thickness and of identical masonry was constructed inside it, from the floor of the excavation. At a height of 2.7 feet above the floor it was finished off as a banquette-like structure similar to those in Kivas II and III. Later, possibly after the kiva had been used for some time, the banquette was discontinued upward with identical masonry. It remained to the same height as the outer wall. The top of the old banquette could easily be seen

*Do all these kivas have the bench built separately from the wall? You imply a facing between in each case. Is this right?*

6

in the finished wall for thin slabs were used for its top course about a part of its circumference. The interior diameter of the finished wall was 11.1 feet. The interior walls showed some evidence of plaster and packed hard. The floor was smooth, there being evidence of four distinct layers of hard packed adobe averaging about .05 feet apart. *was therefore reduced to*

The ventilator complex was similar to the others, in this case being oriented some thirty degrees south of east. It consisted of a not quite straight trench which began 4.9 feet inside the east wall and was 6.9 feet long. It was 1.5 feet deep and averaged 1.4 feet wide. Though not floored, the walls were constructed of masonry identical with that of the other walls of the structure. The wall was interrupted to a height of 2.1 feet above the floor where the trench pierces it and was supported with a stone slab lintel. How this trench was roofed is obscure, there being no evidence of transverse vigas or seats for them. At the eastern end of the trench was the usual vertical shaft communicating with the surface. Its interior diameter was about .7 by 1.4 feet. It was of masonry which looked as though it was constructed inside a pit, and was 4.8 feet high when found. The fireplace was of four vertical stone slabs and adjoined the western end of the trench. It is 1.6 by 1.5 feet and .8 feet deep. When found it was filled with a mixture of ash and charcoal. It was not quite in line with the end of the trench.

Just how early in the occupation of the village this kiva was built is not clear. That it was used until the abandonment is suggested by the character of the fill, which was principally wind and water deposited sand and contained almost no refuse. ~~It appeared to be a natural fill.~~ Had the kiva been abandoned before the village, it seems likely that some refuse would have accumulated in the fill. Thus this structure is shown on the map of the later phase (Figure ( ) ), though it might also have been used during the lower phase also.

~~Some time,~~ <sup>Perhaps</sup> probably before the initial occupation of the village, three large stones fell from the cliff to come to rest on a comparatively level portion of the talus slope some twenty feet north-east of the center of Kiva IV. Each was irregularly ovoid in shape, the largest being about eight feet long and three feet wide and the others slightly smaller. They fell close together, one alongside the other so that there were two crevices left between them. These were remodeled apparently to be used as bins.

The ~~most~~ <sup>eastern</sup> crevice<sup>s</sup> was designated Room 53. (See Figure ( ) ). It was remodeled by building walls at its north and south ends. At its north end a wall 3.2 feet long, 1.8 feet high and .8 feet thick was constructed of Type III masonry. At the south end was a similar wall 4.5 feet long, near the eastern end of which were the nearly destroyed remains of a small door, the bottom of which was raised 5 feet above the interior floor

of the structure. This wall enclosed an area 5.9 feet long. The interior contained several irregular stones, but it had <sup>It is not</sup> been filled to the top of these irregularities and a hard pack-<sub>clear</sub> ed floor constructed. The rock on the west side shelved up obliquely to cover about half of the floor space. It probably also had some artificial covering, at a height of about three feet above the floor.

The other crevices was designated Room 54. The two rocks rested against one another at the northern end so that no wall was necessary. The southern end was closed by a wall 1.7 feet long, 1.8 feet high, and .6 feet thick composed of one large vertical slab and a small area filled with horizontal sandstone slabs. The structure must have been entered from the top as there was no door. It was 6.0 feet long, 2.1 feet in maximum width, and 2.2 feet high above the floor, which was similar to that of Room 53. This structure may have been built rather early in the occupation of the village for it was somewhat doubtfully associated with the earliest plaza level in this vicinity.

There was a single isolated room, Room 40, constructed against the side of the cliff some one hundred and forty feet south of the Kiva II Complex. (See Figure ( ), inset) and hidden from the rest of the village by a gigantic rock. It was in a rather bad state of preservation, being almost completely washed

down the talus slope. Remains extant consisted of two walls 7.5 feet apart extending out from the cliff. They averaged 1.4 feet thick and remained 2.4 feet high. Each was a little under five feet long. Both were eroded away beyond this point and the talus dropped sharply away from them. Between them was the remains of a hard packed floor which wall also eroded away at its eastern end.

About four feet above the floor and slightly to the north of the center of the room an area about a foot and a half in diameter, apparently originally a projection inconvenient to the inhabitants, was pecked off smooth. At a height of 7.1 feet above the floor were two viga seats which had been pecked into the wall. They averaged .5 feet in diameter and .3 feet deep and were at the same level 3.7 feet apart. Directly over this room was a petroglyph which was probably made <sup>from</sup> ~~by someone sitting~~ ~~on~~ the roof. (See Figure (9), No. (1) ).

An enormous sandstone fragment at the bottom of the talus slope in front of the village provided a large natural <sup>shelter opening</sup> shade facing to the east. Under the <sup>shelter</sup> shade was a large sandstone fragment which presented a large flat oblique side, On this rock were eleven deep impressions which looked as though they must have been used for grinding, possibly axes. Also incised into this stone are the petroglyphs illustrated in Figure ( ),

No. ( ). These latter are historic, probably Navajo, and do not relate to the rest of the manifestations.

About seventy feet to the south of the Kiva II complex are the badly eroded remnants of six steps pecked in the side of the cliff. These gave access to a ledge above which communicates with the mesa top. They were flat bottomed ~~notches~~ <sup>niches</sup> about .4 feet wide, .3 feet high and at the time they were observed they were less than .1 foot deep, being so badly eroded that they could not be used. They averaged a little over a foot and a half apart and scaled a perpendicular cliff. See Figure ( ).

and after all, maybe should permit  
 like slash,  
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 " notch or niche, " " nitch  
 (several others back for they)

In words like  
this try to follow  
Bc 50 spellings -

MATERIAL CULTURE

POTTERY

(Lang and Cline)

CHIPPED STONE

There are only four chipped stone artifacts. Three are projectile points and the other is problimatical. The remarkable lack of chipped stone tools parallels the extreme paucity of fragments of chonchoidially fracturable stone of any kind at this site. Stone chipping seems ~~not~~ to have been an important industry.

Check  
Kiddee  
(cf. Bc 50, 51)  
→ P. 7  
(De long)

The largest projectile point or possible knife is of brown flint and has shallow side notches and a flat base, the flaking being mediocre. It is 3.1 inches long, 1.0 inches wide, and .2 inches thick. (See Figure ( ), No. 14). The other side notches point is of brown quartzite and is similarly shaped with deeper notches and sharper point. The flasking is excellent and shape very symmetrical. It is 1.2 inches long, .55 inches wide, and .04 inches thick. (See Figure (-), No. 16).

Pueblo type  
Compare w.  
Bc 50 & 51, p. 91

Check  
Kiddee  
Art of Pecos

The third is of very heavily patinated flint and is a stubby corner notched point with a convex base. The flaking is mediocre. It is .6 inches long, .5 inches wide, and .1 inch thick. (See Figure ( ), No. 15). The other object is a long, narrow flake of light brown flint, the two naturally sharp edges of which

?

show a slight use retouch. Both ends are round and near one is a pair of lateral notches. It is 1.6 inches long, .55 inches wide, and .2 inches thick. (See Figure ( ), No. 17).

PECKED, ABRADED, AND POLISHED STONE

There are nine smooth, flat, ovoid pebbles of quartz, quartzite, diorite, and two unidentified hard stones. The largest is 2.2 inches in maximum diameter and the smallest is .7 inches. These are apparently pottery smoothers. Three additional irregularly shaped flat stones of comparatively soft ( ) are gound swaure about the edges and the surfaces of each are ground to several flat facets. They may have been used for grinding or polishing some perfectly flat surface. They vary from 2.5 to 1.8 inches in maximum diameter and each is about .3 inches thick. (See Figure ( ), No. 18). One possibly similar fragmentary artifact is of slate. One flat, square edged, rectangular piece of red shale has two deep notches at each end. It is very well smoothed and polished and may be a bead or pendant. It is .9 inches long, .65 inches wide, and .1 inch thick. (See Figure ( ), No. 19). One small cylindrical green turquoise bead is well polished and symmetrically made. It is .13 inches in diameter, .05 inches thick, and has a hole .06 inches in diameter. (See Figure ( ), No. 20). There are small fragments of two

*Strand?  
rope!  
Kinnon,  
Mulligan,  
braid*

sandstone slab metates and three worn out sandstone manos. Two rough quartzite fragments show evidence of use as pecking stones.

WORKED BONE AND SHELL

Awls, of which there are thirteen, are the most numerous item. Four are made of deer metapodia, two from the distal and two from the proximal end. Of the former the butt of one is made of half the distal articular process (Figure 6), No. 2), while both the articular processes may have been used on the other which is fragmentary. (Figure 6), No. 1). The proximal end specimens are made of small sections of the shaft and are much smoothed about the butt. (Figure 6), No. 3 and 6). One is made of a small bird bone and two others of small rodent bones. (Figure 6), Nos. 9-11). One is made of a fragment of the spirous process of the scapula of a deer. (Figure 6), No. 8). The heaviest awl is made of the distal end of a deer femur, being beveled on the posterior side and having a zig-zag incised decoration encircling it transversely. (Figure 6), No. 7). Four are made of fortuitous fragments of heavy long bones. (Figure 6), Nos 4 and 5). Almost all of the awls are well smoothed and carefully made. The longest is fragmentary and was probably originally over five and one half inches long. The shortest is 2.3 inches.

There are two game counters. One is a well smoothed, though somewhat irregularly made rectangular section of long bone

TJW, pretty so good

shaft. 1.2 inches long, .4 inches wide, and .2 inches thick. The other is ovoid of unidentified bone, with one convex and one flat surface which bears an incised cross hatched design. It is .8 inches long, .4 ? inches wide, and .1 inch thick. (Figure (6), Nos. 12 and 13). One "figure eight" bead is symmetrically made and highly polished. It is .4 inches long, .25 inches wide, and .2 inches thick. (Figure (6), No. 22).

One olivella shell bead is made by cutting a large portion off each end of the shell. (Figure (6), No. 21).

One fragmentary bracelet is of glycymeris shell which possibly came from the Gulf of California. It represents about a quarter of a circle about two inches in diameter. It is well smoothed and polished, and is about .2 inches thick. (Fig. 6 # 23)

*Repeat Bracelet*

#### VEGETABLE FIBRE ARTIFACTS

The mat or screen mentioned as having been found on the floor of Room 24 was probably originally several feet long. It lay in a heap on the floor and only a small portion of it could be preserved long enough to be photographed. (Figure (7), No. 1). It was probably originally somewhat over 1.9 feet wide and was made of stalks of ( ) laid transversely and held together by at least six pairs of thin, twined unidentified fibres. *was probably a* This would have made an excellent door screen, and it may have served as such.

There are three small fragments of twined textile, possibly parts of a sandal. It is made of ( ) fibre. The warp elements are heavy, solid fibres .03 inches in diameter and are .15 inches apart. The twined elements are <sup>vally</sup> sinistral~~ly~~ twisted two strand cords .02 inches in diameter, being pressed tightly together so that there are about twenty-two pairs of elements to the inch. The fabric averages .09 inches in thickness. A small fragment and a conventionalized section to show the twining are illustrated in Figure (S), No. 2. The selvage edge shown on the conventionalized section is on the original specimen.

Two small fragments of twilled textile were found. These are of ( ) fibre and are both twilled in such a manner that each element passes over two and under two elements. The elements are all flat, varying in width from .1 inch to .25 inches. A fragment of the textile and a conventionalized section to show the weaving are shown in Figure (V), No. 1.

There are two wooden implements, both of ( ) wood. One appears to be the distal end of a digging stick. It is a somewhat spatulate implement, ovoid in cross section and shaped very much like the blade of a machete. One surface is convex and the other is flat, neither edge is sharp. The maximum thickness is .6 inches, maximum width 1.8 inches, while the fragment is 19.5 inches long. (Figure (V), No. 2). The other specimen may also be part of a digging stick handle. It is ovoid in cross section, has a smoothed surface and is broken at each end. The fragment is 16.5 inches long, 1.3 inches in maximum width, and 3.5 inches thick.

PETROGLYPHS

Not the least significant items are the many petroglyphs which cover portions of the cliff, principally those sections to the west of the Kiva II Complex. They are illustrated in Figure (9).<sup>1</sup> They are of particular interest because their association in the Casa Sombreada pattern is almost certain. Most are in areas once covered by rooms and are <sup>placed at such a height</sup> ~~so high on the cliff~~ that they could <sup>standing now on</sup> only have been made by artists in the rooms. It would have been virtually impossible to reach them either before the construction or after the destruction of the pueblo. Further most of them are concentrated in areas which would have been of convenient height within the rooms, and absent in areas where floors abutted against the cliff. *Good*

Most of the solid and heavy line figures are pecked while the narrow lines are usually <sup>scratched</sup> incised. The "sandal lasts" in Nos. 2 and 7 were apparently first made by pecking and then the whole area within the figure was ground smooth. No. 1 is pecked on the wall above Room 40 and No. 11 are under the before mentioned shade at the foot of the talus slope. These show historic objects and are not related to the other material. They are probably Navajo. With these exceptions all the other petroglyphs are on the wall to the west of the Kiva II Complex in the vicinity of the multi-storied structure.

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1. The numbers with the petroglyph groups illustrated refer to the coordinates in Figure ( ).

7



— Point  
and looking?

7

8