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A SURVEY OF PUEBLO II ARCHAEOLOGY
WITH SPECIAL EMPHASIS ON THE UPPER SAN JOSE DISTRICT

By

Stanley Dowlen Bussey

A Thesis

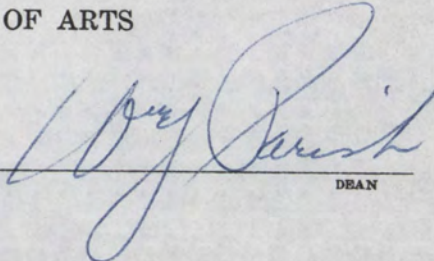
Submitted in Partial Fulfillment of the
Requirements for the Degree of
Master of Arts in Anthropology

The University of New Mexico

1964

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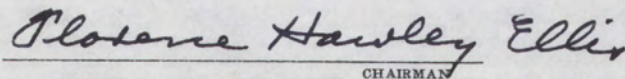
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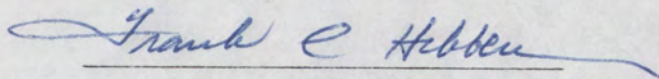
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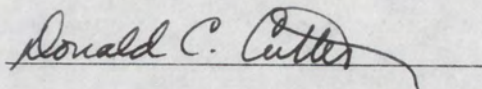
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PREFACE

The author wishes to thank a number of people without whose assistance the writing of parts of this thesis would have been difficult or impossible. Dr. Florence H. Ellis, Dr. Frank C. Hibben, and Dr. Donald Cutter aided materially in both clarifying and expanding the text. Dr. W. W. Hill provided advice and encouragement in a critical moment. Dr. Alfred E. Dittert gave permission to use certain figures which will be published in the forthcoming volume "Highway Salvage Archaeology in the Prewitt District." Jack E. Smith kindly allowed the author to use draft manuscripts from the same publication. Dr. Joel Shiner provided much information on the pottery of the Upper San Jose District, some of which is reproduced in Appendix B. Robert K. Alexander provided information on the areal extent of the Upper San Jose District pottery types from the collections of the Highway Cultural Inventory Program of the Laboratory of Anthropology. Mr. Jimmy Largo of Thoreau, N. M., allowed the author to survey parts of his ranch.

Finally, the author would like to express his gratitude to his wife, Beth, who helped with typing and preparing sketches and figures.

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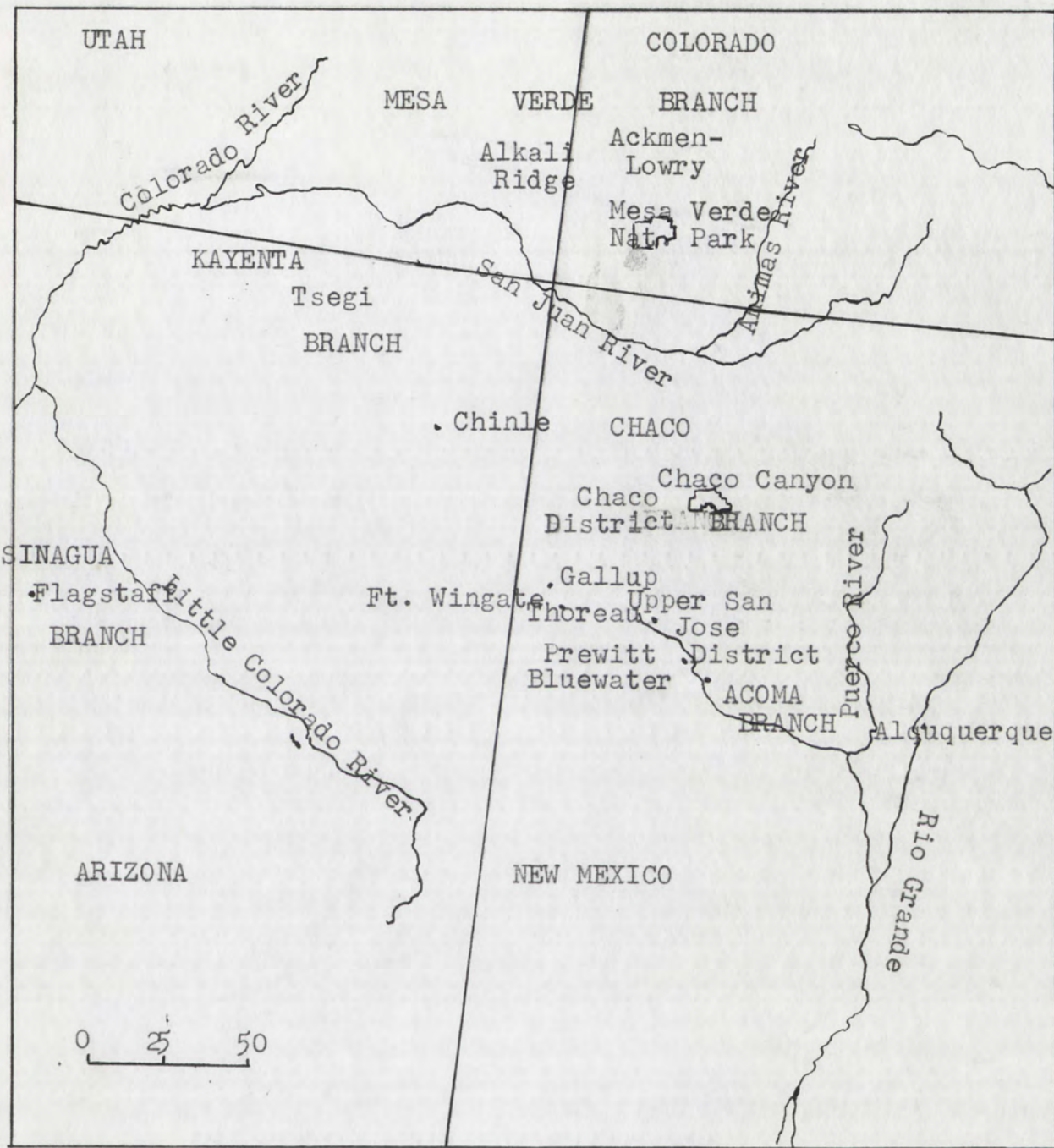


Figure 1. The Anasazi Area

CHAPTER I

STATEMENT OF PROBLEMS

In the summer of 1962, the Laboratory of Anthropology of the Museum of New Mexico excavated twenty-three pre-historic sites on the right-of-way of a new highway, U. S. Interstate 40. The sites, located just south of the present U. S. Highway 66 from Bluewater, N.M., to the Fort Wingate Ordinance Depot, east of Gallup, N.M., appeared to be of Pueblo II provenience, as that culture period is broadly known. Analysis of the sites in terms of the overall Pueblo II pattern throughout the Anasazi Southwest is made difficult by the lack of a detailed consideration of the period. Generalized descriptions are available in several sources,¹ but these are necessarily broad because this period of development never has been studied extensively. More detailed treatments of the period have been made in some excavation reports, but these usually deal only with the area immediately surrounding the excavation.

¹Paul S. Martin, George I. Quimby and Donald Collier, Indians Before Columbus (Chicago: University of Chicago Press, 1947); John C. McGregor, Southwestern Archaeology (New York: John Wiley And Sons, 1941); and H. Marie Wormington, "Prehistoric Indians of the Southwest," Colorado Museum of Natural History, Popular Series, No. 7 (Denver: Peerless Printing Co., 1947).

The First Problem. The Pueblo II period is known to have been one of transition with much variation in regional traits. The first problem is to analyze the regional data now known and from them derive a definition of Pueblo II for the areas of New Mexico, northern Arizona, southern Utah and southern Colorado in which sites of the period are found. Various taxonomic systems used for the period will be reconciled.

In handling the first problem only data on house types and pottery will be considered, although there is evidence that the bow and deformed crania were present. Evidence of sandals, basketry and textiles is lacking in most open sites. Only reports using modern terminology are used. Such reports either use standard terminology in classifying pottery or describe in detail the terminology used. Site reports which do not include pottery statistics are not considered in detail. In some areas, such as the Rio Grande Valley, data on excavated Pueblo II sites are not available. These areas are not considered in this thesis.

The Second Problem. The second problem is to classify the new excavated sites as described in this paper as to their cultural relationship and time scale in relation to these other Pueblo II complexes.

Branch	Mesa Verde	Chaco	Chaco	Kayenta
District or Area	All	Chaco	Upper San Jose	All
Pecos Classification	Roberts' 1939 Classification			
Pueblo V	Historic Pueblo			
Pueblo IV	Renaissance Pueblo	Kintiel?		Jeddito Tsegi
Pueblo III	Regressive Pueblo	Bonito		
	Great Pueblo	McElmo	Hosta Dutte	Klethla
Pueblo II	Developmental Pueblo		Wingate	Prewitt
Pueblo I			Red Mesa	Black Mesa
Basketmaker III	Modified Basketmaker	Four Corners	White Mound	White Mound? Lino
Basketmaker II	Basketmaker	?	?	?
Basketmaker I	Omitted	?	?	White Dog ?

TABLE I

A CORRELATION OF THE PECOS CLASSIFICATION, THE ROBERTS CLASSIFICATION, AND THOSE SECTIONS AND MODIFICATIONS OF THE GLADWIN CLASSIFICATION USED IN THIS THESIS

CHAPTER II

PROBLEM ONE: PUEBLO II IN SOUTHWESTERN CLASSIFICATIONS

I. The Pecos Classification System

In 1927, the Pecos Classification, intended to insure some conformity of terms in reports, was devised during the first Pecos Conference. The Anasazi sequence was divided into eight consecutive periods of culture development: three Basketmaker periods and five Pueblo periods. At that time, it was believed that Basketmaker and Pueblo represented two different racial groups. These periods were defined by the presence of certain material cultural traits. For example, the Pueblo II period was defined primarily on the basis of the presence of small, one-story unit pueblos built as long rows of rooms, shorter double rows of rooms or "L"-shaped rows of rooms with a kiva, usually subterranean, to the south or southeast, and the appearance of corrugated utility pottery.¹ The author feels that the strength of the Pecos Classification system is its value in making generalizations. Conversely, others feel that the major weakness of the Pecos Classification is that it is too generalized. Except for

¹Frank H. H. Roberts, Jr., "The Ruins at Kiatuthlanna, Eastern Arizona," Bureau of American Ethnology, Bulletin 100 (Washington: Government Printing Office, 1931) p. 4.

Pueblo V, the Historic Pueblo period, no dates were assigned to periods. As tree-ring dates became available, there was some tendency to assign period status to sites on the basis of date rather than on the basis of the trait complex, contrary to the stated original intention of the system.

II. The Roberts Classification System

In 1939, Frank H. H. Roberts, Jr., of the Bureau of American Ethnology, published an alternate system of classification which simplified the early periods by combining Pueblo I and Pueblo II into one "Developmental Pueblo" period.² Roberts' changes are given in Tables I and II. Problems arising from the use of this classification are discussed in Section IV of this chapter.

III. The Gladwin Classification System

In 1934, Winifred and Harold Gladwin of Gila Pueblo, Globe, Arizona, published their classification which divided the prehistoric populations of the Southwest into Roots, Stems, Branches, and Phases, each of diminishing scope.³ The Gladwins' classification is similar to McKern's

²Frank H. H. Roberts, Jr., "Archaeological Remains in the Whitewater District, Eastern Arizona. Part I, House Types," Bureau of American Ethnology, Bulletin 121 (Washington: Government Printing Office, 1939) p. 7.

³Winifred and Harold S. Gladwin, "A Method for Designation of Cultures and Their Variations," Medallion Papers, No. 15, 1934.

TABLE II

ROBERTS' AMENDMENT OF THE PECOS CLASSIFICATION*

Pecos Classification, 1927	Roberts, 1930 and 1932	Roberts, 1939
Basket Maker I_____	Basketmaker I_____	Omitted
Basket Maker II_____	Basketmaker II_____	Basket Maker
Basket Maker III_____	Basketmaker III_____	Modified Basket Maker
Pueblo I_____	Pueblo I_____	Developmental Pueblo
Pueblo II_____	Pueblo II_____	
Pueblo III_____	Pueblo IIIa_____	Great Pueblo
	Pueblo IIIb_____	Regressive Pueblo
Pueblo IV_____	Pueblo IVa_____	Renaissance Pueblo
	Pueblo IVb_____	
Pueblo V_____	Pueblo V_____	Historic Pueblo

*Frank H. H. Roberts, Jr., "Archaeological Remains in the Whitewater District...", p. 7.

classification for the Midwest, except that the McKern system implies only material relationships without any time elements being involved.⁴ Gladwin suggested that the Root classification, in this case the Basketmaker-Caddoan Root, be based on "fundamental distinctions--such as difference in physical type."⁵ As Gladwin linked Basketmaker groups with "Caddoan" groups, a hypothesis for which no basis later could be found, his "Basketmaker-Caddoan Root" was replaced by "Anasazi Root."⁶ Instead of a difference in physical type, certain diagnostic traits apparently typical of the Anasazi Root were used. The traits, as listed by McGregor,⁷ are: the general use of black-on-white decorated pottery; the use of gray utility pottery; the practice of firing (most) pottery in a reducing atmosphere, i.e., an atmosphere from which an excess of oxygen has been excluded; the use of scraping as a finishing technique for pottery; and the presence of kivas or other ceremonial rooms.

The distinction between Stems is based by the Gladwins

⁴W. C. McKern, "The Midwestern Taxonomic Method as an Aid to Archaeological Culture Study," American Antiquity, Vol. 4, No. 4, pp. 301-313, 1939.

⁵Harold S. Gladwin, "The Chaco Branch, Excavations at White Mound and in the Red Mesa Valley," Medallion Papers, No. 33, 1945, p. 5.

⁶Harold S. Colton, "The Sinagua: A Summary of the Archaeology of the Region of Flagstaff, Arizona," Museum of Northern Arizona, Bulletin 22, 1946, p. 14.

⁷John C. McGregor, Southwestern Archaeology, p. 125.

on "major differences of architectural features and methods of manufacturing pottery."⁸ Branches are "geographical unit(s); each distinguished by characteristic styles of architecture, pottery, et cetera; yet...linked by certain common denominators."⁹

The Stems which Gladwin gives as growing from the Anasazi Root are the San Juan and the Little Colorado. The Branches of the San Juan Stem are given by Gladwin as the Kayenta and the Mesa Verde. Those of the Little Colorado Stem are given as the Chaco, Cibola, Salado, and Mimbres. In 1934,¹⁰ the Gladwins stated that their Branches were roughly synonymous with Kidder's culture-areas, but they seem to have neglected Kidder's Rio Grande Culture Area.¹¹

Gladwin's Cibola, Salado, and Mimbres Branches, which are not considered in this thesis, are being redefined as increasing knowledge of archaeology in those areas provides new data. The Salado Branch is still being discussed and redefined. The Cibola and Mimbres Branches are mixtures of Mogollon and Anasazi cultures; their people

⁸Gladwin, Harold S., "The Chaco Branch...", p. 5.

⁹Ibid.

¹⁰Winifred and Harold S. Gladwin, "A Method for Designation of Cultures...", p. 10.

¹¹A. V. Kidder, An Introduction to the Study of Southwestern Archaeology, With a Preliminary Account of the Excavations at Pecos (New Haven: Yale University Press, 1924) pp. 84-87.

made brown or red utility pottery (fired in an oxidizing atmosphere) instead of gray utility wares. The Salado Branch has not yet been adequately defined for the Pueblo II period. The Sinagua Branch was too little known at the time the Gladwins wrote to be given in their listing. The Gladwins never attempted a major revision of their original classification. They have disposed of their collections and research facilities and moved to California.

Gladwin defines a Phase as a "selected stage" in the evolution of a Branch. A Phase is, therefore, the archaeological totality of the culture of a Branch taken at one of the various "select intervals along...(the)... continuous curve" of the evolution of a Branch.¹²

Gladwin's system may be fitted into either Roberts' or the Pecos Classifications. His method is best illustrated in his discussion of the Chaco Branch, which will be considered later.

IV. The Purpose of Classification Systems

The purpose of a classificatory system is to assemble related data by a logical nomenclature recognized by all who use it. In discussion or in comparison, the use of the "symbol," whether it be "Anasazi Root" or "Red Mesa Phase," implies the complex of cultural traits assigned to

¹²Harold S. Gladwin, "The Chaco Branch...", p. 5.

that classificatory unit. In specific discussion, a phrase such as "the Red Mesa Phase pottery complex" denotes an understood grouping of pottery types. The intended use of the classificatory system governs the level of division desired. To give an example, for general purposes such as a book on the prehistory of North America, Roberts' term "Late Developmental Pueblo" is sufficiently exact to cover this period of development, but in a more detailed study, where intraperiod distinctions may be made, further division by terms may be necessary. The use of the Gladwin system easily permits such elaborations with a short phrase, "Wingate Phase," after the initial identification of period, area, and date have been made. Other than ease of use, however, no term is any better than any other, as long as the definition of the term is known. The major fault of the Gladwin classification, as Brew has pointed out,¹³ is that it may carry the connotation of actual biological descent when such a connotation is not intended.

In the present study, the author has used the Pecos system of culture period, as based on development, combined with the Gladwin system of Root, Stem, Branch, and Phase. In addition, the geographic term "district" will be used to denote a subdivision of a Branch which occupies a distinct area and has its own distinct characteristic

¹³J. O. Brew, A. Brues, and V. H. Jones, "Archaeology of Alkali Ridge, Southeastern Utah," Papers of the Peabody Museum of American Archaeology and Ethnology, Vol. 21, 1946, pp. 52-54.

variations of the Branch culture. Finally, the author follows Colton in adopting McKern's concept of a "component" to indicate "the expression of a focus at a site where more than one focus is indicated."¹⁴

In order to solve the first problem, i.e., to define the general pattern or patterns for Pueblo II, it is necessary to consider empirical data from pertinent Stems and Branches throughout the Anasazi Southwest. In the following chapter, the San Juan Stem, Mesa Verde and Kayenta Branches and the Little Colorado Stem, Chaco Branch will be considered. As noted above, reports using modern pottery terminology are given preference in this consideration. In addition, pottery statistics are considered necessary in assigning sites to a relative position within the period. Reports which use modern pottery terminology but provide no pottery percentages are largely ignored. Sites which have been completely excavated are discussed in preference to sites which have been only partially excavated.

¹⁴Harold S. Colton, "The Sinagua...", p. 14.

Colton prefers McKern's term "focus" to Gladwin's term "phase," but he uses Gladwin's definition of that subdivision rather than McKern's. See Harold S. Colton, "Prehistoric Culture Units and Their Relationships in Northern Arizona," Museum of Northern Arizona, Bulletin 17, 1939, p. 9.

CHAPTER III

PROBLEM ONE: DISCUSSION OF SITES

I. The San Juan Stem, Mesa Verde Branch

During the Pueblo II period, the Mesa Verde Branch occupied the area north of the San Juan River, from the Animas River west to the junction of the San Juan and Colorado Rivers.¹ The Mesa Verde National Park is considered the central district, i.e., the culture center of the area. Outside the boundaries of the Park, sites of the Pueblo II period have been excavated in the Ackmen-Lowry area to the north,² the Alkali Ridge area to the west,³ and the La Plata area to the south.⁴ Although these areas have never been formally separated as individual districts of the Mesa Verde Branch, they are frequently so considered.

¹Leland J. Abel, in Harold S. Colton (ed.), "Pottery Types of the Southwest," Museum of Northern Arizona Ceramic Series, No. 3, 1955, Ware 12A--Type 3.

No page numbers are given in the published version of Abel's University of New Mexico Master's thesis. Ware and Type numbers, given on the inside corner of each page, will be used instead. Wares and Types are given in numerical order.

²P. S. Martin, L. Roys, and G. von Bonin, "Lowry Ruin in Southwestern Colorado," Field Museum of Natural History, Anthropological Series, Vol. 23, No. 1, 1936; and P. S. Martin, C. Lloyd, and A. Spoehr, "Archaeological Work in the Ackmen-Lowry Area, Southwestern Colorado, 1937," Field Museum of Natural History, Anthropological Series, Vol. 23, No. 2, 1938.

³J. O. Brew, A. Bruess, and V. H. Jones, "Archaeology

Pueblo II pottery in general may be briefly described as black-on-white wares with poor finishing and careless painting techniques, with neck-banded (early) and corrugated utility pottery and small amounts of black-on-red types. During the period, the temper of the black-on-white pottery shifted from sand or crushed rock to crushed sherd. The diagnostic pottery type for Pueblo II of the Mesa Verde Branch is Mancos B/W. This type was named by the Gladwins in 1934, but was not formally described until Paul S. Martin of the Field Museum of Natural History, Chicago, published a description in his report on the Lowry Ruin, north of the Mesa Verde National Park.⁵

In 1955, Leland Abel of the National Park Service, using material from Site 16, Mesa Verde National Park, divided "Mancos B/W" into three types. The two earlier types, Cortez B/W and Morfield B/G, were divided from the later Mancos B/W mainly on the basis of the use of crushed rock temper in the earlier types and crushed sherd temper in the later type.⁶ As no excavations of Pueblo II sites in the

of Alkali Ridge..."

⁴Earl H. Morris, "Archaeological Studies in the La Plata District, Southwestern Colorado and Northwestern New Mexico," Carnegie Institute of Washington, Publication No. 519, 1939.

⁵P. S. Martin, L. Roys, and G. von Bonin, "Lowry Ruin...", pp. 80-94.

⁶Leland J. Abel, in Harold S. Colton (ed.), "Pottery Types...", Ware 12A--Types 3, 4, and 5.

Mesa Verde District have been published since Abel's new classification became available, it is not certain that the Cortez-Morfield-Mancos division will prove valid outside the immediate area of Mesa Verde Site 16, the type site.

The Mesa Verde District

Before the 1947-48 excavations of Deric O'Bryan of Gila Pueblo, no Pueblo II sites had been excavated in the Mesa Verde District. On the basis of a survey of one hundred and two ruins made by Gila Pueblo in 1929, the Gladwins had given the name Mancos Mesa Phase to the Pueblo II manifestation of the Mesa Verde Branch,⁷ but all of the excavated sites of the Phase were outside the Mesa Verde District. In 1947-48, O'Bryan excavated, among others, two sites with clear Mancos Mesa Phase components and one Transitional Pueblo II-III (Mancos Mesa-McElmo Phase) site.⁸ In 1950, J. A. Lancaster and J. M. Pinkley of the National Park Service excavated one site, M. V. Site 16,⁹ with three

⁷Winifred and Harold S. Gladwin, "A Method for Designation of Cultures....," pp. 28 f.

⁸Deric O'Bryan, "Excavations in Mesa Verde National Park, 1947-48," Medallion Papers, No. 39, 1950.

⁹J. A. Lancaster and J. M. Pinkley, "Excavation at Site 16," in J. A. Lancaster, et al., Archaeological Excavations in Mesa Verde National Park, Colorado, 1950, Archaeological Research Series, No. 2, National Park Service, Department of the Interior.

Pueblo II occupation periods. All four of these sites are on Chapin Mesa, just east of the head of Navajo Canyon. On the basis of tree-ring dates and architectural comparisons, the three Pueblo II sites fall into the following sequence:

1. Site 16, Post and Adobe Village.¹⁰

Date: (Estimated) Ca. 900-925, based on architectural comparison with Site 102, Pueblo.

2. Site 102, Pueblo.¹¹

Date: (Tree-ring) 947+.¹²

3. Site 16, Unit Pueblo I.¹³

Date: (Estimated) Late tenth or early eleventh century, based on architectural comparison with Sites 102 and 1.

4. Site 1, Pueblo.¹⁴

Date: (Tree-ring) 966+ -1024.

5. Site 16, Unit Pueblo II.¹⁵

Date: (Tree-ring) 1074.

¹⁰J. A. Lancaster and J. M. Pinkley, "Excavation at Site 16...", pp. 32-37.

¹¹Deric O'Bryan, "Excavations in Mesa Verde...", pp. 28-36.

¹²In the Gladwin method of tree-ring dating, a "+" indicates an unknown number of rings missing from the outside of the specimen.

¹³Lancaster and Pinkley, op. cit., pp. 37-42.

¹⁴O'Bryan, op. cit., pp. 44-51.

¹⁵Lancaster and Pinkley, op. cit., pp. 42-53.

In all three of the sites, "Mancos B/W" is the main indigenous decorated pottery. Although Abel states that "Cortez Black-on-white follows more closely the same styles found on Red Mesa and Kiatuthlanna Black-on-white vessels, while Mancos Black-on-white follows more closely the designs found on Gallup and Chaco Black-on-white,"¹⁶ two things hinder an attempt to reclassify sherds pictured in O'Bryan, 1950, and Lancaster and Pinkley, 1954. First, sherds classifiable on the basis of temper as Mancos B/W may have Cortez-style designs, and, second, neither O'Bryan nor Lancaster and Pinkley give provenience with their sherd illustrations. Without knowing the original locations of the sherds pictured, reclassification from the photographs would not help in making time distinctions between sites.

The sites are discussed below.

Site 16, Post and Adobe Village.¹⁷ (Figure 2) The Post and Adobe Village is the earliest Pueblo II occupation of Site 16. The Village consists of an undetermined number of rooms which may or may not constitute a single house block, and a circular kiva or pit house. The walls of the surface rooms are made of adobe strengthened by upright posts set in the ground. Two corrugated jars are set into floors as cists. The surface structures had been burned

¹⁶Leland J. Abel, in Harold S. Colton, "Pottery Types...", Ware 12A--Type 3.

¹⁷J. A. Lancaster and J. M. Pinkley, "Excavation at Site 16...", pp. 32-37.

SITE NO. 16Mesa Verde National Park
ColoradoPOST and ADOBE VILLAGE

Ground plan and Kiva profile

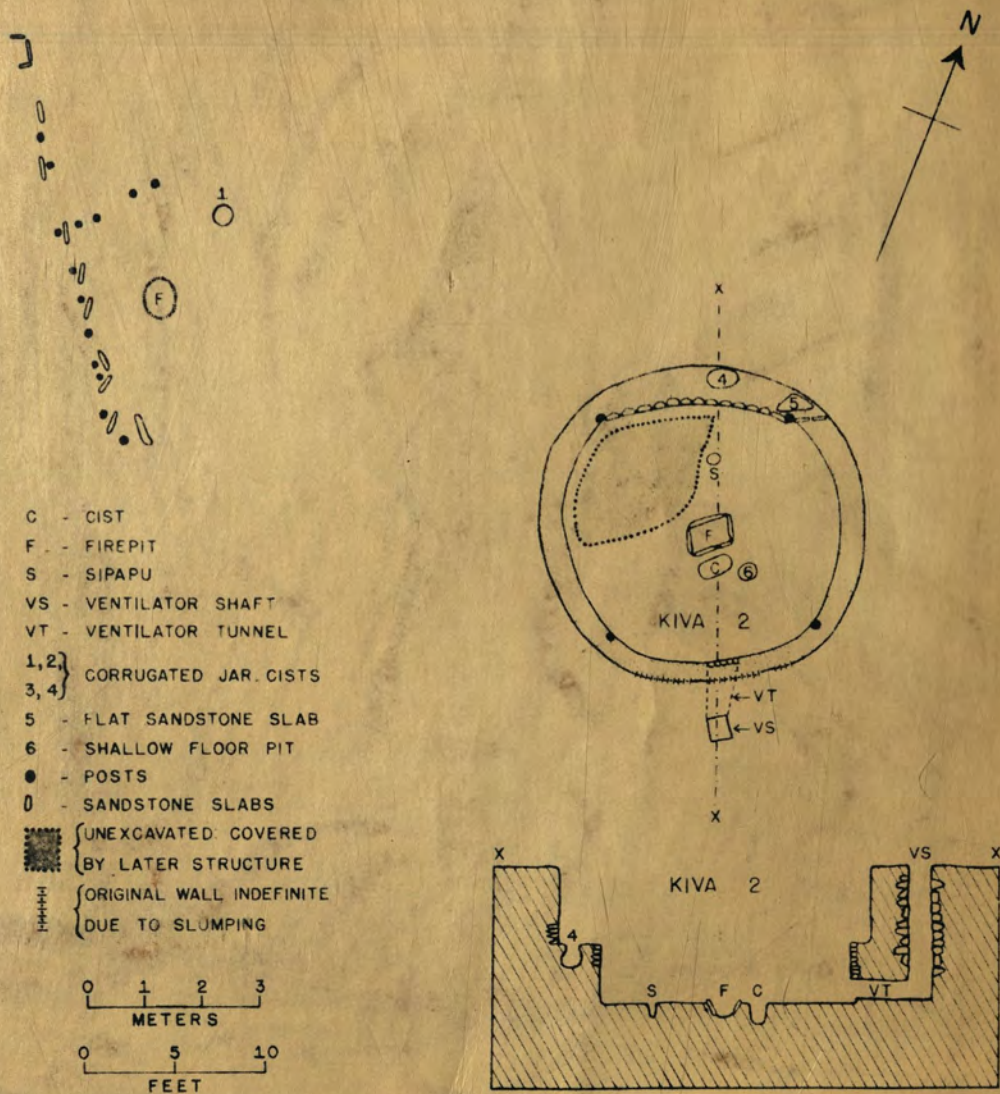


Figure 2. Mesa Verde Site 16, Post and Adobe Village. Site plan and kiva profile.

*J. A. Lancaster and J. M. Pinkley, "Excavation at Site 16...", Plate 20, p. 31.

and the debris scraped into the "kiva" to make room for Unit Pueblo I.

The walls of the "kiva" are of native earth, except in places where stone masonry sections are needed to stabilize the loose fill of older pit houses cut during the construction of the "kiva." Four roof-support posts are set into the bench encircling the kiva. Floor features include an aligned ventilator, ash pit, slab-lined firebox and sipapu, and a shallow floor pit and a large corrugated jar set into the bench as a cist.

Lancaster and Pinkley consider this structure a kiva rather than a pit house because of the lack of household equipment, "metates, cooking vessels and the like,"¹⁸ and the probability that the roof supports were placed on the bench to leave more room for ceremonial activities. They believe that kivas with roof-support posts set in a bench are the precursors of four-pilastered kivas.

It should be pointed out that the "kiva" was not burned. It does not seem likely that anything of value would have been left in the "kiva" when it was deserted. Usually, the only artifacts left at a deserted site are metates too heavy to carry. For these reasons, Lancaster and Pinkley's first reason for classifying the subterranean structure as a kiva seems weak. The author believes that this structure should

¹⁸Lancaster and Pinkley, "Excavation at Site 16...",
p. 35.

be considered a pit house, as there is no proof that the surface structures were used as dwellings.

This site was classified as Pueblo II, Mancos Mesa Phase, on the basis of pottery. The architecture, post and adobe surface structures, is regarded as a Pueblo I type.

Site 102, Pueblo.¹⁹ (Figure 3) The Mancos Mesa Phase component of Site 102 consists of two surface rooms, a circular kiva, and a trash mound. The masonry of the surface structure is "a combination of masonry blocks, slabs on end, and small sandstone fragments set in adobe plaster. Some of the upright slabs had been faced with mud and sandstone chips to increase the width of the wall base. Probably a cross post or wattle-and-daub upper wall was built on this foundation."²⁰ The floor of the east room is slightly below the outside undisturbed layer. The floor of the west room is built on debris from an earlier occupation. It could not be well defined. No floor features were found in either of these rooms.

The inside of the kiva is circled by a bench about a meter high. The surface of the bench is the top of a gypsum deposit through which the kiva was cut. The top of the bench and the floor are leveled with adobe plaster.

¹⁹Deric O'Bryan, "Excavations in Mesa Verde...", pp. 28-36.

²⁰Ibid., p. 32.

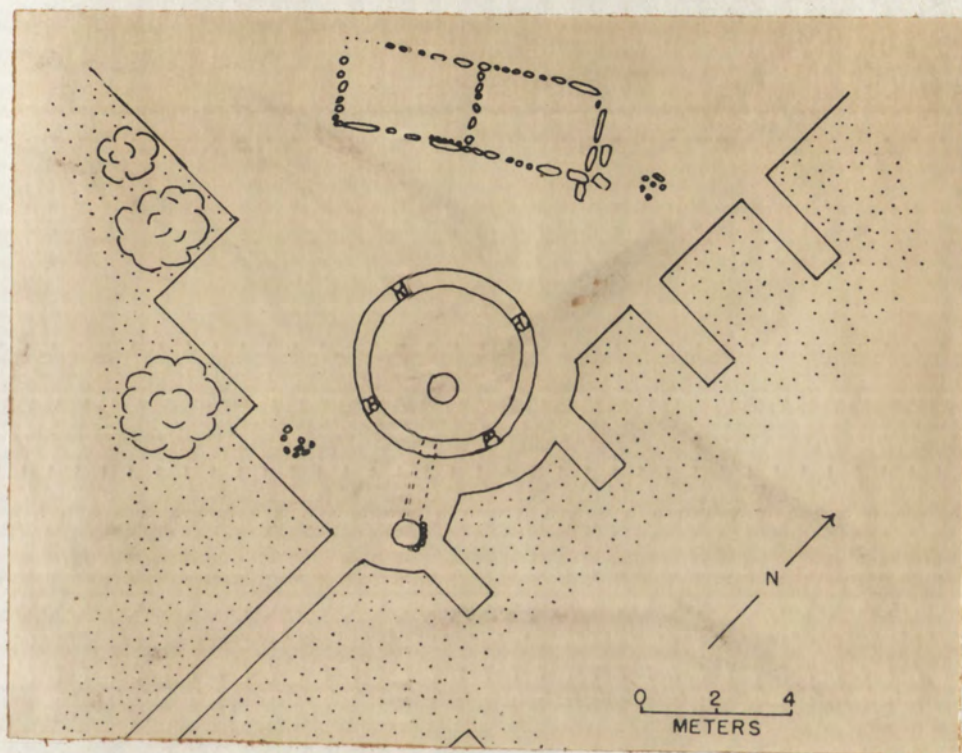


Figure 3. Mesa Verde Site 102, Pueblo.* The rectangular surface structure northwest of the pit house has no floor features or other evidences of having been used as a dwelling.

*Deric O'Bryan, "Excavations in Mesa Verde...",
Figure 9, p. 31.

Adobe plaster is also used to cover all exposed gypsum surfaces. Four stone masonry pilasters are set on the bench. Floor features include two ladder sockets, a floor pocket, and a shallow fire basin. The upper portion of the ventilator shaft is lined with stone masonry where it passes through loose fill.

At this point it should be noted that if one follows Roberts' 1935 definition of Pueblo II characteristics strictly, the Pueblo unit at Site 102 cannot be so classified, as it has less than six rooms. However, the presence of Pueblo II pottery places this site in the Mancos Mesa Phase. It is doubtful that Roberts intended to establish rigid criteria such as the exact number of rooms for the assignment of sites to cultural periods.

The undecorated pottery at Site 102, Pueblo, consists mainly of Lino Gray (50.5 per cent of the total count), Kana-a Gray (23.5 per cent), and Corrugated (9.5 per cent). Abel has assigned new type names to Lino Gray and Kana-a Gray in the Mesa Verde District because of the local use of crushed rock temper rather than sand temper. These new types, Chapin Gray and Mocassin Gray, both last until at least 900 in the Mesa Verde District.²¹

La Plata B/R, a Pueblo I type which lasted into Pueblo II,

²¹Leland J. Abel, in Harold S. Colton (ed.), "Pottery Types....," Ware 10A--Types 1 and 3.

was present in fairly large quantities--109 sherds, two per cent of all pottery. "Manos B/W" made up 11.5 per cent of all pottery.

Site 16, Unit Pueblo I.²² (Figure 4) Unit Pueblo I consists of a three-room house block, a smaller separated room set to the southwest, and a circular kiva. The pueblo walls are made of crude stone masonry with posts incorporated to strengthen the walls. One room, the largest, contains a slab-lined firebox and an ash pit. Except for one jar cist, none of the other rooms have any floor features. The three rooms without fireplaces were probably used for storage.²³ The roughly dressed masonry stones vary in size.

About half the kiva was left unexcavated to preserve a later structure built over it. Features in the excavated portion of the kiva which are aligned with the ventilator are a deep firepit lined with slabs in its upper portion, a sipapu, and a wall niche. The cribbed roof was supported by six pilasters which are built on the encircling bench. The stone masonry ventilator shaft is built against the inside edge of the bench of the kiva of the Post and Adobe Village, with the ventilator tunnel running through the bench into the kiva of Unit Pueblo I. The kiva of the Post

²²Lancaster and Pinkley, "Excavation at Site 16....," pp. 37-42.

²³Ibid., p. 38.

SITE NO. 16

Mesa Verde National Park
Colorado

UNIT PUEBLO NO. I

Ground plan and profile

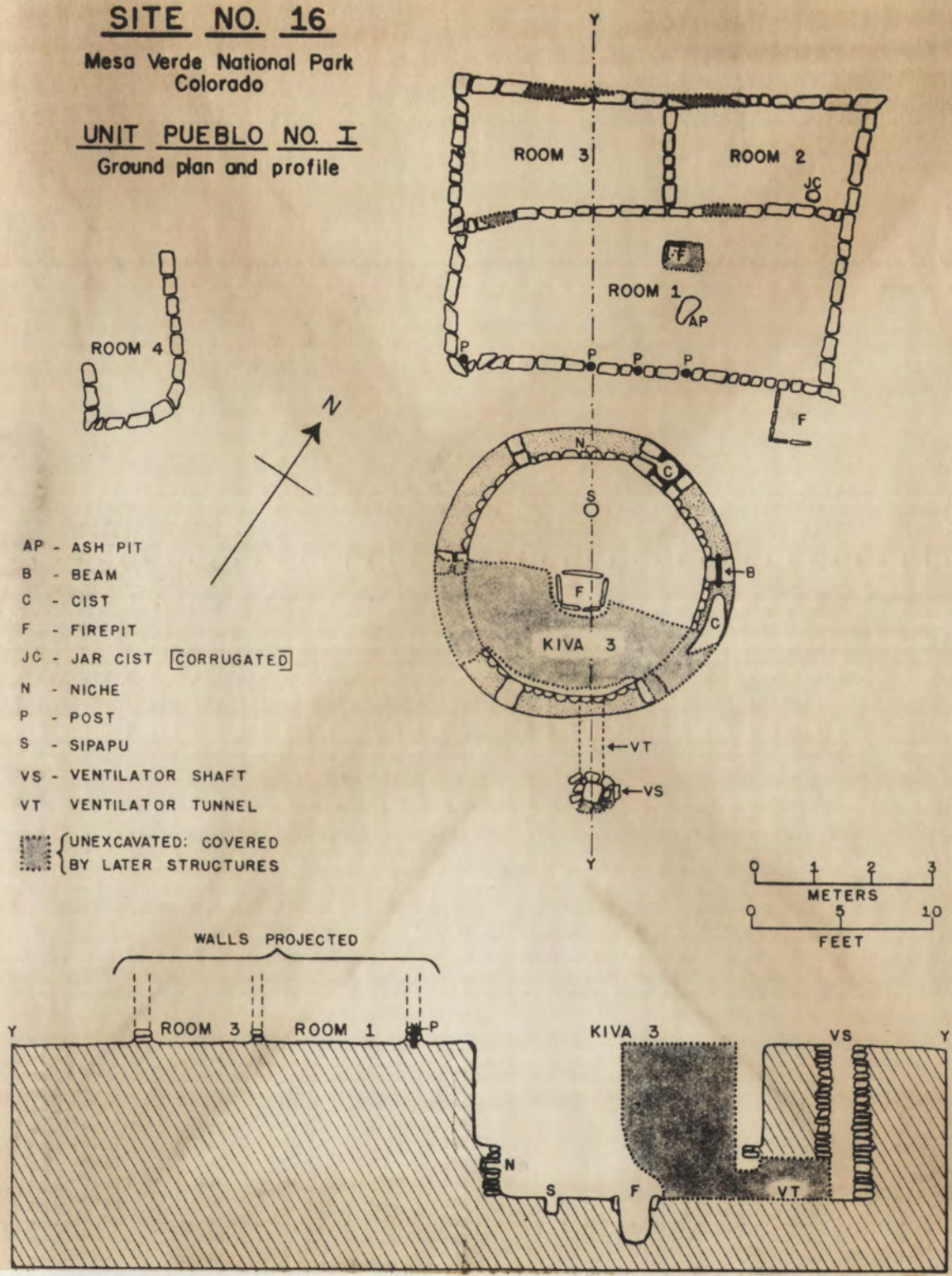


Figure 4. Mesa Verde, Site 16, Unit Pueblo No. 1,*
Plan and Profile.

*J. A. Lancaster and J. M. Pinkley, "Excavations at
Site 16," Plate 25, p. 39.

and Adobe Village was backfilled with material from the construction of the kiva of Unit Pueblo I. The kiva is lined with stone masonry as far as the top of the bench. Excavation through the floor of the superimposed structure showed that the kiva did not have a southern "keyhole" recess.

This unit is the first occupation in the sequence with definite evidence that people were living in the surface structure. It is also the earliest site with an aligned north wall niche, a feature of later Mesa Verde kivas.

Site 1, Pueblo.²⁴ (Figure 5) The Mancos Mesa Phase component at Site 1 consists of two masonry surface rooms and a circular kiva. The west room is "D"-shaped and contains a slab bin, two firepits, one at each floor level, four postholes, one pair at each floor level, and a floor pocket. The walls are rock-faced with rubble core. A doorway opens to the southeast, toward the kiva. O'Bryan believes that all of the floor features belong to an earlier slab-lined house built on the same spot.²⁵

The east room is rectangular, with walls of coursed stone masonry. The only floor furnishing is a slab bin. A doorway connects the two rooms.

²⁴Deric O'Bryan, "Excavations in Mesa Verde....," pp. 44-51.

²⁵Ibid., p. 48.

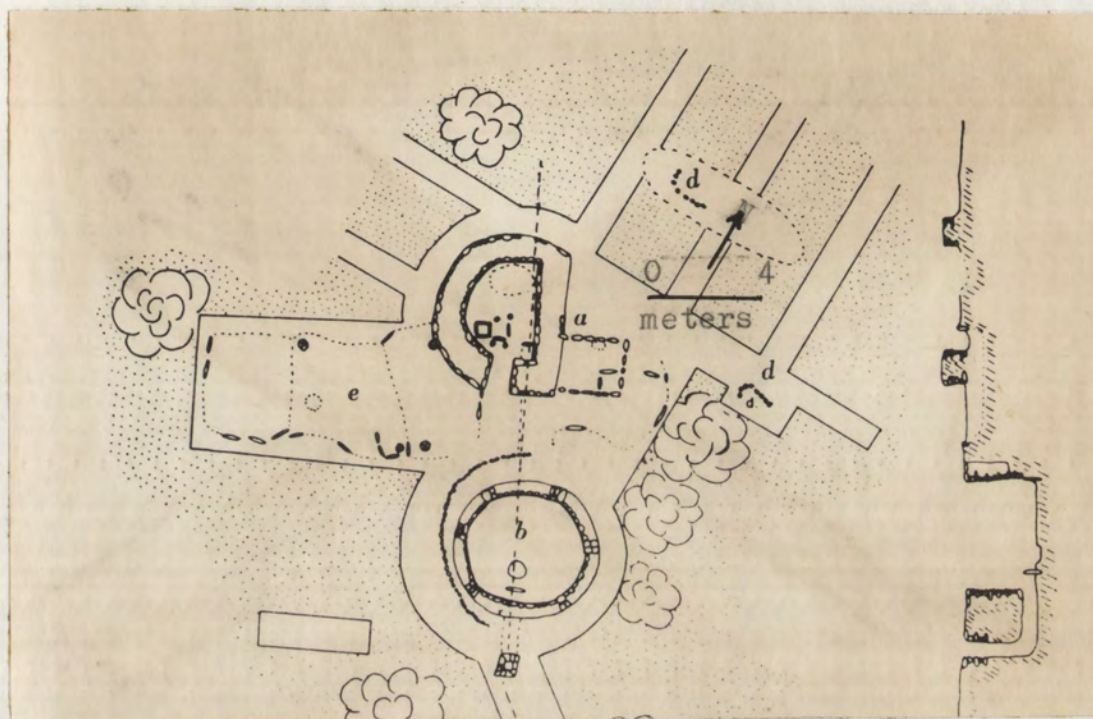


Figure 5. Mesa Verde Site 1, Pueblo.*
 Plan and profile. Compare the masonry of the
 "D"-shaped room with that of the pueblo and
 towers of Mesa Verde Site 16, Unit Pueblo No. II
 (Figure 6).

*Deric O'Bryan, "Excavations in Mesa
 Verde...", Figure 7, p. 45.

O'Bryan believes that the D-shaped room was not a tower because of the rubble core masonry. However, Lancaster and Pinkley believe that similar structures at Site 16, Unit Pueblo II are towers. Both sites have been so heavily robbed of building material that no estimates can be made of original wall heights.

The kiva has been remodeled once. The original structure had an encircling bench about a meter high. The wall was built of "coursed blocks of dressed masonry" to the top of the bench.²⁶ The cribbed roof was supported by six stone masonry pilasters built on the bench. Later reconstruction filled in the areas between the pilasters with coursed stone masonry, converting it to a circular structure without bench or pilasters. No southern bench extension was found in the earlier kiva. The ventilator shaft is masonry-lined above the junction of shaft and tunnel. Floor features are a slab deflector, a fire basin, a floor pocket, and an unaligned sipapu (?). A stone masonry retaining wall or windscreen is built along the outside of the western half of the kiva.

The undecorated pottery of the Mancos Mesa Phase component of Site 1 consists mainly of Corrugated (not typed, 46 per cent of all pottery), with Lino Gray (15 per cent) and Kana-a Gray (10.5 per cent) as less important types.

²⁶Deric O'Bryan, "Excavations in Mesa Verde...",
p. 49.

As O'Bryan points out, this is a shift in importance toward the later type.²⁷ "Manos B/W" has increased to 25 per cent of all pottery.

Site 16, Unit Pueblo II.²⁸ (Figure 6) Unit Pueblo II consists of a circular kiva, three towers, and a pueblo of undetermined shape and size. The site has been robbed of building stone to such an extent that even the lowest courses of many walls are missing.

The kiva has the most typologically advanced features of any kiva in the sequence. The cribbed roof was supported by eight pilasters which rest on an encircling bench. A southern bench recess is present. The walls are lined with stone masonry to the tops of the pilasters. Features aligned with the ventilator are a slab-lined firebox, a sipapu, and a niche in the north wall of the bench. Additional features are two other niches in the bench face, and "two oblong and two circular floor cists; 6 cylindrical floor holes; 1 potrest (?); 1 post hole."²⁹ A retaining wall or windscreen similar to the one found at Site 1, Pueblo, extends in a ninety degree arc east from true north around part of the kiva.

²⁷Deric O'Bryan, "Excavations in Mesa Verde...", p. 93.

²⁸J. A. Lancaster and J. M. Pinkley, "Excavation at Site 16...", pp. 42-53.

²⁹Ibid., p. 49.

SITE NO. 16

Mesa Verde National Park
Colorado

UNIT PUEBLO NO. II

Ground plan and profile

- - CIRCULAR PIT
- C - CIST
- D - DEFLECTOR GROOVE
- F - FIREPIT
- P - POST
- S - SIPAPU
- VS - VENTILATOR SHAFT
- VT - VENTILATOR TUNNEL
- XX - RETAINING WALL P

For detailed plan of Kiva
see following Plate

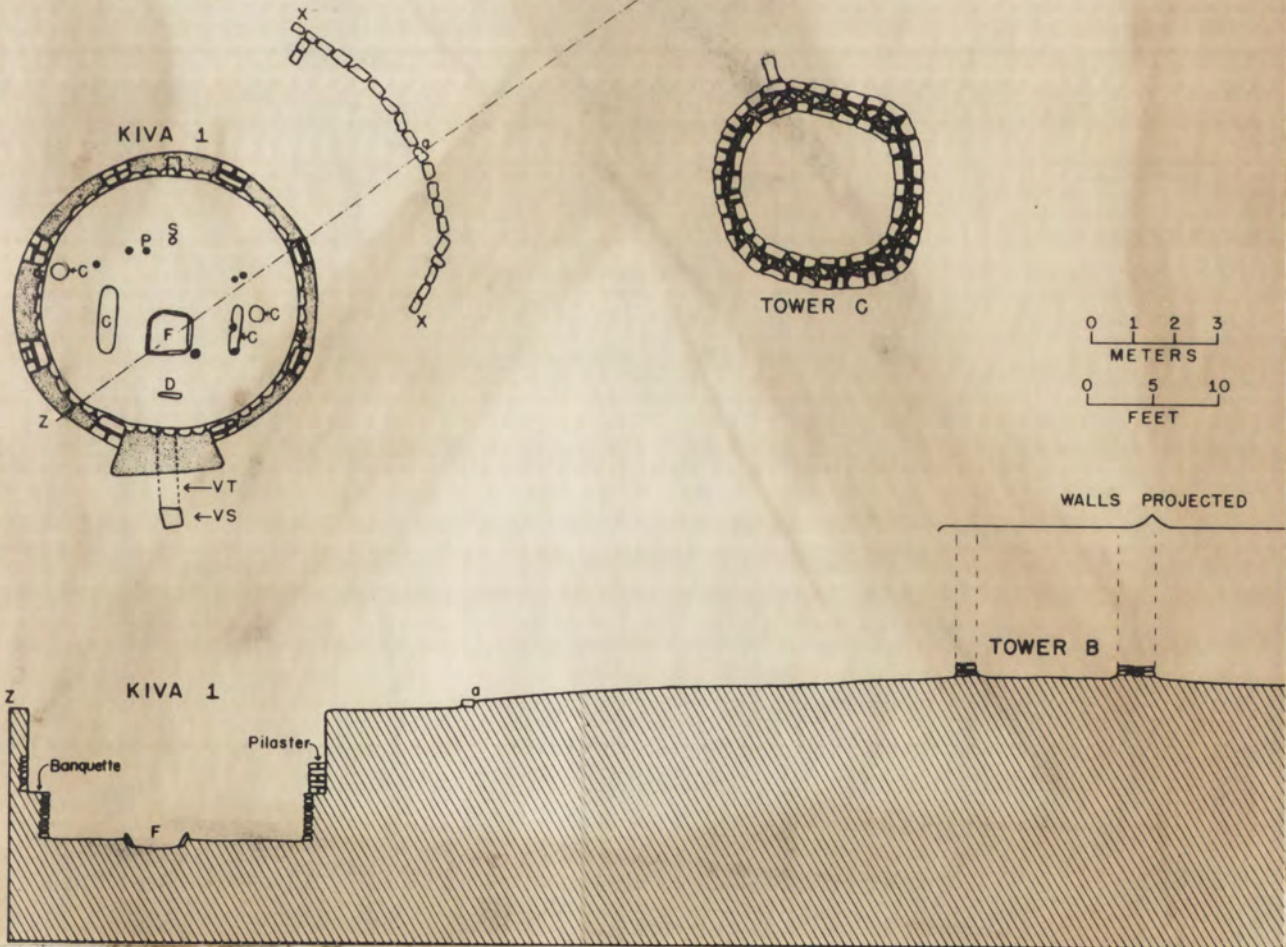


Figure 6. Mesa Verde Site 16, Unit Pueblo No. II.*
Plan and profile. The pueblo has been so thoroughly robbed
of building stone that much of the structure cannot be traced.

*J. A. Lancaster and J. M. Pinkley, "Excavations in
Site 16...", Plate 28, p. 43.

The masonry of the three towers and the pueblo is very similar to that of the D-shaped room in O'Bryan's Site 1, Pueblo. Both use rock-faced rubble core walls. One tower is connected to the south corner of the pueblo. The other two lie to the southeast of the pueblo block.

Discussion of the Mesa Verde District Sites. The architecture of the Mancos Mesa Phase components of these three sites shows a good typological progression from earlier Pueblo I-type post and adobe surface rooms accompanied by a structure that may be either pit house or kiva. This uncertain early type developed into surface structures using masonry of dressed stones and rock-faced rubble core masonry accompanied by a structure that is undeniably a kiva. All of the sites are in the same area. A circle with a radius of a quarter of a mile would include them all. Further excavation may show that a great deal of random variation is present in architecture.

Unfortunately, Abel's more refined pottery classification had not been worked out when these sites were excavated. More work in the Mesa Verde District may result in the division of the present Mancos Mesa Phase into two phases, the early phase characterized by Cortez B/W, La Plata B/R and high percentages of Chapin Gray (the Mesa Verde variant of Lino Gray) and Mocassin Gray (the Mesa Verde variant of Kana-a Gray), and the later phase characterized by Mancos B/W and Mancos Corrugated. The architecture of

the early phase would consist of small surface storage rooms accompanied by pit houses, and the architecture of the late phase of surface dwellings and storage rooms accompanied by kivas.

The Ackmen-Lowry Area.

The Ackmen-Lowry, Colorado, area is about forty miles north of the Mesa Verde National Park. During the period 1930-37, parties from the Field Museum of Natural History, Chicago, excavated four small Pueblo II sites and one large Pueblo II-III site. An extensive site survey was conducted in 1937. The four small sites, excavated in 1937, are about ten miles southwest of Pleasant View, Colorado.³⁰

Two of the small ruins have stone masonry surface structures, one has a jacal surface structure, and one has a slab-house surface structure. All of these ruins contain kivas or "house-kivas." The slab-house site includes a pit house with a vestibule entrance. Paul S. Martin of the Field Museum, "using the stratigraphic data from Lowry ruin, and on the basis of a typological study of pottery and architecture, coordinated with the table given in Part I of the Introduction (a period-by-period listing of traits),... ranked the four sites according to time sequence as follows:

³⁰Ackmen, Colorado, and Lowry, Colorado, are not shown on modern road maps.

- (Slab-house) "Site 1: early Pueblo I period (about A.D. 800)
 (Jacal) "Site 4: late Pueblo I period (about A.D. 850)
 (Masonry) "Site 2: early Pueblo II period (about A.D. 900)
 (Masonry) "Site 3: late Pueblo II period (about A.D. 1000)"³¹

The sites are described below in order of typological age.

Site 1.³² (Figure 7) Site 1 consists of a sunken room (25 cm. below ground surface) with slab-based stone masonry walls, a jacal lean-to on the north side of the sunken room, a pit house with an antechamber or vestibule, and a house-kiva. A line of post holes extending west from the wall line of the jacal unit probably represents another jacal unit or a windbreak. Except for one cist, no floor features are found in the surface structures, though another cist and a firepit are found outside the structures to the southeast. All structures except the pit house had burned.

The main room of the pit house has six post holes in the floor, but no other features. It is roughly square. The floor, very uneven, is about 1.28 meters below the surface. The southern antechamber is about a meter higher than the floor of the main room.

³¹P. S. Martin, C. Lloyd, and A. Spoehr, "Archaeological Work in the Ackmen-Lowry Area...", p. 294.

³²Ibid., passim.

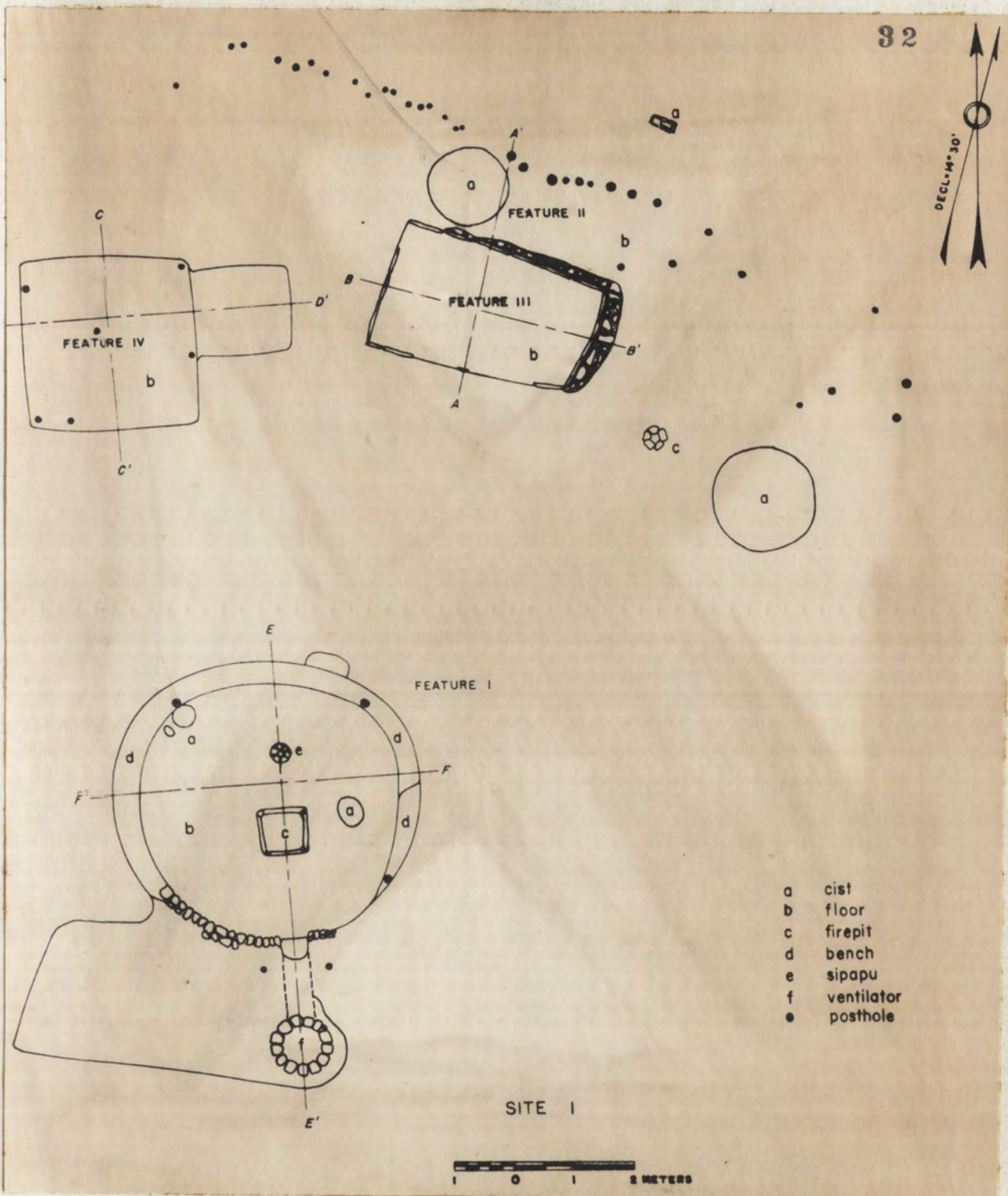


Figure 7. Ackmen-Lowry Site 1.* Note the lack of features in the surface structures. Feature II is probably a jacal lean-to. Feature IV is a pit house and Feature I either a pit house or a kiva.

P. S. Martin, C. Lloyd, and A. Spoehr, "The Ackmen-Lowry Area...", Map 6, p. 240a.

The circular house-kiva contains a low bench circling the structure. There are three post holes in the bench. A slab-lined firebox, three floor cists and an aligned sipapu with a collar of small stones around the opening comprise the floor features. The walls and floor are of native earth, except for stone masonry segments on each side of the ventilator opening and a stone masonry collar around the outside opening of the ventilator shaft.

Although "Mancos B/W" makes up only about nine per cent of the total pottery on the site, it is about eighty-two per cent (my figure) of the total decorated pottery, excluding white and red sherds with no diagnostic design.³³ In addition, it is the only decorated pottery (14 sherds) found on the floor of the house-kiva, except for Abajo R/O (4 sherds) and Deadmans B/R (3 sherds). Since Mancos B/W, by old definition or new, is definitely a Pueblo II pottery type, this site, on the basis of pottery, must be considered Transitional Pueblo I-II at the earliest. By correlation with dates established for the Mesa Verde District, this site should date ca. 900 rather than ca. 800.³⁴

³³P. S. Martin, C. Lloyd, and A. Spoehr, "Archaeological Work in the Ackmen-Lowry Area....," p. 273.

³⁴Deric O'Bryan, "Excavations in Mesa Verde....," p. 26; Leland J. Abel, in Harold S. Colton (ed.), "Pottery Types....," Ware 12A--Type 3.

Site 4.³⁵ (Figure 8) Site 4 consists of a kiva which has been remodeled and two jacal houses, one of which had been burned and the other of which may have been burned.

The western jacal room is roughly circular. The walls are composed of sixteen posts, about a meter apart, with adobe "strengthened by small stones"³⁶ between and around them. The only floor feature is a large cist. The eastern room is less well defined. The remaining evidence for the existence of the room consists of seven posts. Four upright sandstone slabs were found in position between posts. No other evidences of walls remain. A small firepit and a cist lie just outside the line of posts.

The house-kiva is south of the surface structures. It has been remodeled from a structure having a low bench (25 cm. high) with roof-support posts in the floor to one having six pilasters made of crudely coursed, undressed stone. The original ventilator is retained in the new structure, but the tunnel opening has been narrowed with masonry. Four cists are built into the bench. Two floor cists slant under the bench.

Mancos B/W and Indented Corrugated are the most common pottery types in both the entire site and the kiva alone. Lino Gray is almost as common as Indented Corrugated. The second most common is Mancos B/W. Comparison with

³⁵P. S. Martin, C. Lloyd, and A. Spoehr, "Archaeological Work in the Ackmen-Lowry Area...", passim.

³⁶Ibid., p. 250.

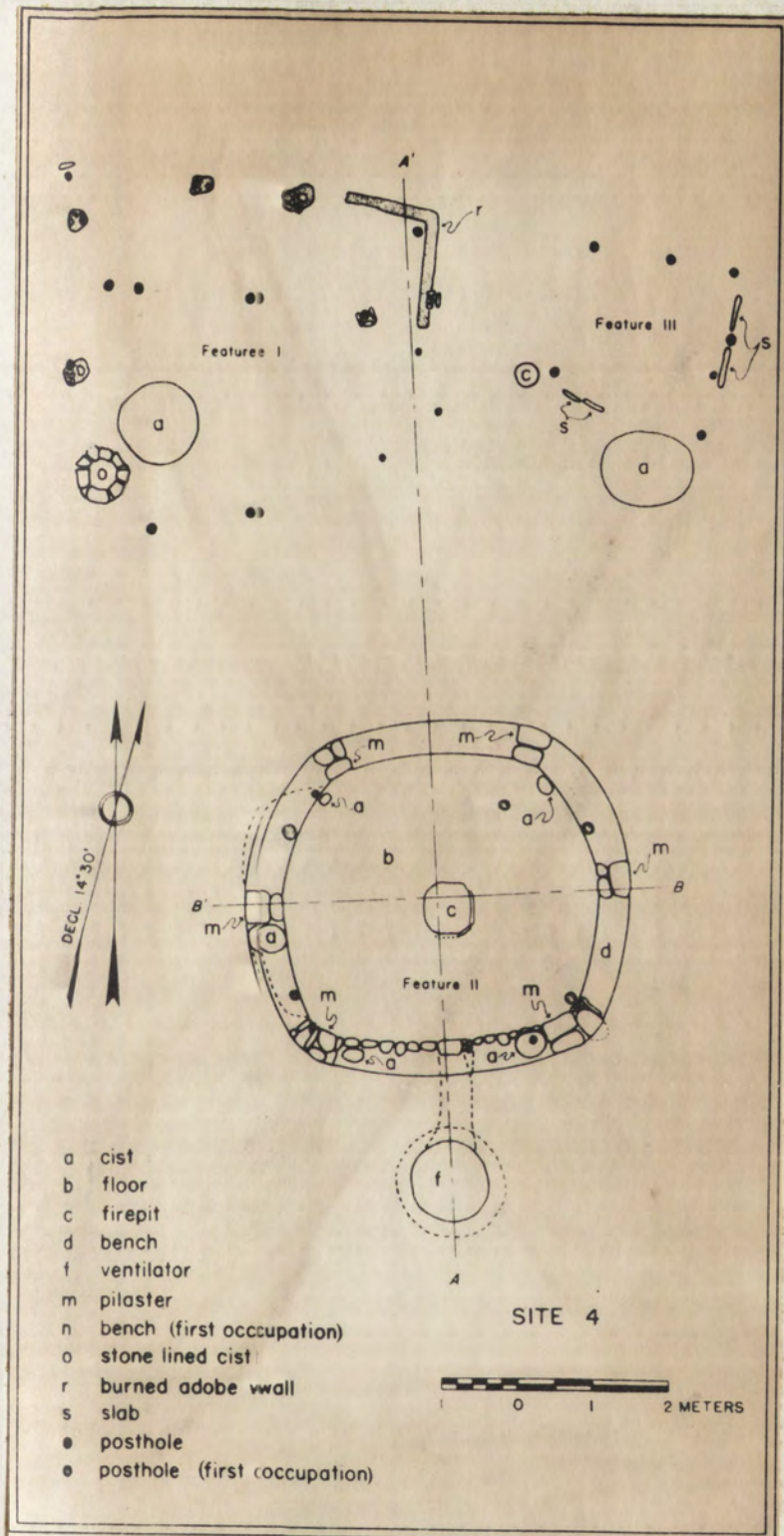


Figure 8.. Ackmen-Lowry Site 4.* Plan.
 Features I and III are jacal surface rooms.
 Feature II is a pit house or kiva.

*P. S. Martin, C. Lloyd, and A. Spoehr,
 "The Ackmen-Lowry Area...", Map 9, p. 252a.

O'Bryan's Sites 102 and 1 shows that corrugated pottery became more common than plain gray pottery in the Mesa Verde District between 947 and 1024. In view of this a date of later than 947 may be suggested for Site 4.

Site 2.³⁷ (Figure 9) Site 2 consists of two separated stone masonry rooms, a wing wall running between the rooms, and a circular kiva. A third stone masonry room, so collapsed as to be undefinable, lies northwest of the other rooms. One outside firepit is southeast of the rooms.

The masonry of the rooms is of crudely coursed variable-sized undressed blocks of sandstone. The wing wall is made of similar stone, but is uncoursed.

The kiva is circular with walls of native earth. The bench is made of crudely coursed undressed sandstone. Four pilasters made of stacked slabs rest on the bench. A storage bin on the bench is made of a slab and one side of the southwest pilaster. The ventilator shaft is bell-shaped and lined with stone masonry. Features aligned with the ventilator are a floor pit, a slab-lined rectangular firebox, and a niche in the north wall.

Mancos B/W and Indented Corrugated are the dominant pottery types. No other type present at the site exceeds

³⁷p. S. Martin, C. Lloyd, and A. Spehr, "Archaeological Work in the Ackmen-Lowry Area...", passim.

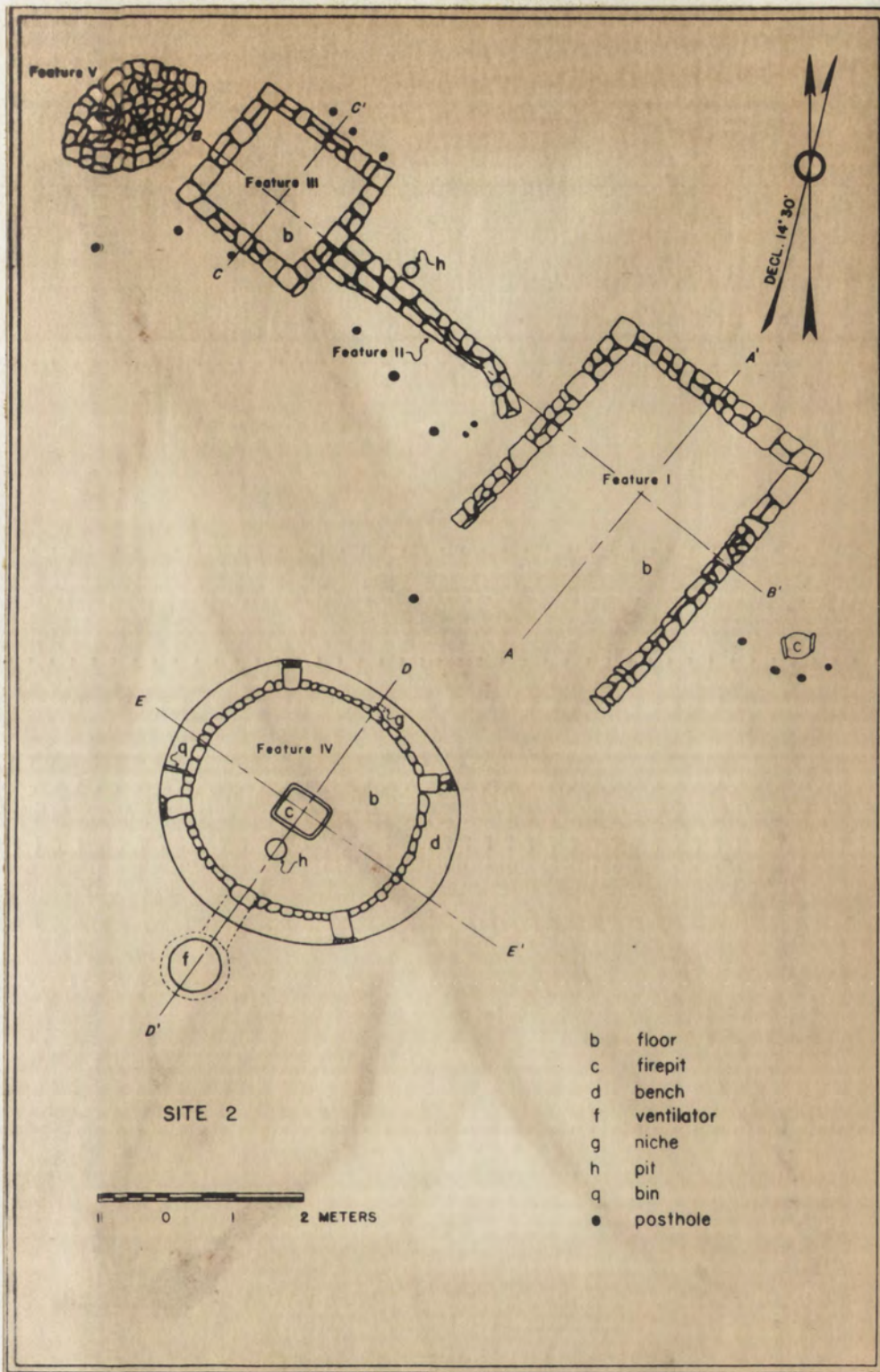


Figure 9. Ackmen-Lowry Site 2.* Plan. The lack of features in the surface rooms indicates that they were not used as dwellings.

*P. S. Martin, C. Lloyd, and A. Spoehr, "The Ackmen-Lowry Area...", Map 7, p. 244a.

one per cent of the total count. No tree-ring dates were obtained for this site, but by comparison with O'Bryan's Site 1, this site probably should date later than 1024. This date would seem late, but certain features of the kiva are considered late. These are the aligned niche in the north wall and pilasters which are wider in back than in front.

Site 3.³⁸ Site 3 consists of five or six rooms and one or two kivas. It was not completely excavated and will not be considered here.

Discussion of the Ackmen-Lowry Sites. If the Ackmen-Lowry sites are assigned to culture periods primarily on the basis of architecture, they certainly fall into the positions to which Martin assigned them. However, if the presence of certain types of pottery and the shifts in relative importance of types are used, a Pueblo II classification is indicated for all sites. The author believes that if the evidences of pottery and architecture conflict at a site, pottery should be used as the period indicator, since at any given time architecture varies in type, especially in small sites. No tree-ring dates were obtained for these sites. The dates suggested in the

³⁸p. S. Martin, C. Lloyd, and A. Speehr, "Archaeological Work in the Ackmen-Lowry Area...", passim.

site descriptions are based on tree-ring dates from O'Bryan's Pueblo II sites, G. P. 102 and 1, in the Mesa Verde District.

The problem which arises when an attempt is made to assign these sites to a certain culture period comes from the use of early architectural types with later pottery types and may be explained by the peripheral position of the area. Changes in architecture have simply lagged behind changes in pottery in the Ackmen-Lowry area, at least in small sites. The only other explanation would be that the use of Indented Corrugated utility pottery and Mancos B/W began earlier in this area than elsewhere. While this is possible, there is certainly no evidence to support such a supposition.

An interesting note is the presence of a few sherds of Reserve B/W from each of the three later sites. This type is characteristic of the Pueblo II Reserve Phase of the Pine Lawn Valley, near Reserve, N. M., and dates from ca. 1000.³⁹

The Area West of the Mesa Verde District.

The Alkali Ridge Area.⁴⁰ In 1946, Brew, Brues, and Jones published the results of the excavation of a number

³⁹P. S. Martin and J. B. Rinaldo, "Sites of the Reserve Phase, Pine Lawn Valley, Western New Mexico," Fieldiana: Anthropology, Vol. 38, No. 2, 1950.

⁴⁰J. O. Brew, A. Brues, and V. H. Jones, "Archaeology of Alkali Ridge...", passim.

Site	Surface Structures		Kiva	With Pilasters	With Southern Recess
	Jacal No. Rooms	Masonry No. Rooms			
Abajo: 7: 2	1	x	x	x	x
Abajo: 7: 3	x	4 or 5	1	4	x
Abajo: 7: 5 ¹	1	x	1	6	yes
5 ²	x	1	1	6	yes
Abajo: 7: 7	x	2	1	6	x
Abajo: 7: 9	4	x	1	x	x
Abajo: 7: 11	1(?)	2	1 ^a	6	antechamber(?)
Abajo: 7: 12	10	2	1 ^b	2	yes
Abajo: 7: 13 ¹	x	3	1 ¹	6	antechamber(?)
13 ²	x	x	12	8	x
			1	6 or 8	yes
			1		yes

Superscript numbers indicate unit of feature numbers.
 Superscript letters indicate remodeled, "a" being the older form.
 "x" indicates not present.

TABLE III

A SYNTHESIS OF ARCHITECTURAL FEATURES FROM SITES ON ALKALI RIDGE

of sites on Alkali Ridge in Southeastern Utah. Nine of the sites were Mancos Mesa Phase or had Mancos Mesa Phase components. Since Brew gives no pottery percentages, any attempt to rank the sites chronologically would have to be based solely on architecture. The architecture of Brew's Alkali Ridge sites is so variable that such a ranking would have little validity. Brew, even with pottery statistics available to him, made no attempt to rank the sites. A synthesis of general architectural features will be found in Table III.

The Cohon Mesa-Bug Mesa Area. In 1903, Prudden published the first description of the "unit type" pueblo considered typical of the Pueblo II period. He described the simplest form of pueblo as a single row of rooms with short extensions at right angles to the main block, the whole "U"-shaped, with the open end usually to the south. A kiva is built between the extended arms of the pueblo, and a refuse or "burial" mound is located south of the kiva.⁴¹ He found this unit type structure throughout the San Juan drainage.⁴²

In 1913, Prudden excavated four unit pueblos and in 1915, three more. The first ruin excavated in 1915 is on Cohon Mesa in western Colorado, about sixteen and one-half

⁴¹T. M. Prudden, "The Prehistoric Ruins of the San Juan Watershed in Utah, Arizona, Colorado, and New Mexico," American Anthropologist, Vol. 5, 1903, p. 234-237.

⁴²Ibid., p. 237-238.

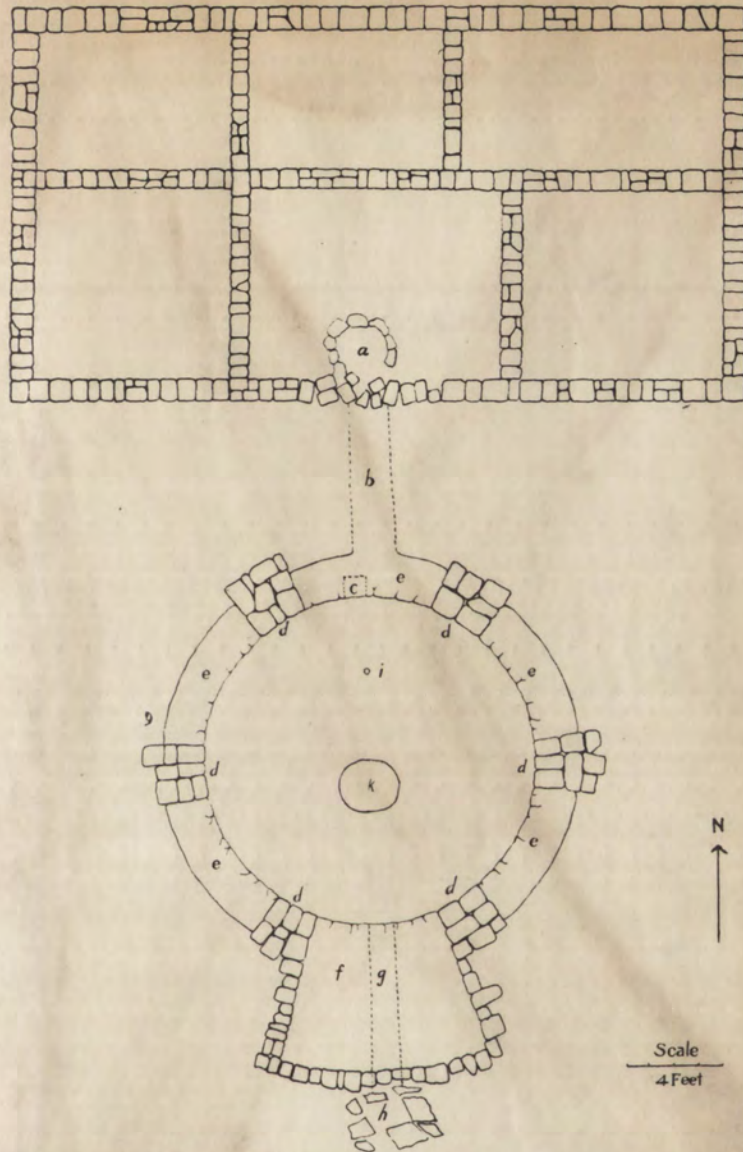


FIG. 1.—Ground plan of Ruin no. v. on Cohon mesa. *a*, Manhole into tunnel to kiva. *b*, Underground tunnel from front room of pueblo to kiva. *c*, Cubby-hole or niche in north wall of kiva beneath banquette. *d*, Pilasters for the support of the roof timbers. *e*, Recesses between the pilasters with banquettes about 33 inches above the level of the kiva floor. *f*, Deep southern recess and banquette. *g*, Horizontal portion of the ventilator flue, opening within at the floor level. *h*, Perpendicular shaft of the ventilator with the opening at the ground level outside the kiva wall and protected by flat stones now displaced. *i*, *Sipapu* in floor of kiva. *k*, Fire pit in floor.

Figure 10. Prudden's Ruin No. V.* Plan. The surface rooms were not completely excavated. The seeming standardization of this Pueblo and Ruin No. VI (Figure 11) suggests that it is Late Pueblo II or Pueblo III. This is a unit pueblo of the type once considered typical of the Pueblo II period.

*T. M. Prudden, "A Further Study of Prehistoric House Ruins...", Figure 1, p. 9.

miles northwest of Ute Mountain.⁴³ The second ruin, on Squaw Mesa between the upper reaches "of Dove creek on the east and Squaw canyon on the west,"⁴⁴ is about twelve miles west of the first. The third ruin, on "'Bug Mesa,' situated between Squaw canyon and Monument canyon further west,"⁴⁵ is about six miles west of the second. This third ruin is about fifteen miles east of Alkali Ridge.⁴⁶

None of the surface structures and only two kivas were completely excavated. The surface structures at the first two sites are six-room rectangular buildings, each arranged in two rows of three rooms. Five rooms were excavated at the third site. The surface structure at this site is built as a single row of rooms.

The masonry of all surface structures is of poorly coursed stone blocks. The kivas are lined with coursed, dressed stone blocks. Aligned features in the kiva of Ruin V, the first site excavated, are a circular firepit, a sipapu, and a northern wall niche. Aligned features in the kiva of Ruin VI, the second ruin excavated, are a stone masonry deflector, a circular firepit, a sipapu, and a northern wall niche. The circling bench in both kivas is about

⁴³T. M. Prudden, "A Further Study of Prehistoric Small House Ruins in the San Juan Watershed," Memoirs of the American Anthropological Association, Vol. 5, 1918, p. 7.

⁴⁴Ibid., p. 13.

⁴⁵Ibid., p. 26.

⁴⁶Distances given are calculated from the map, Plate XVI, in T. M. Prudden, "Prehistoric Ruins of the San Juan..." 1903.

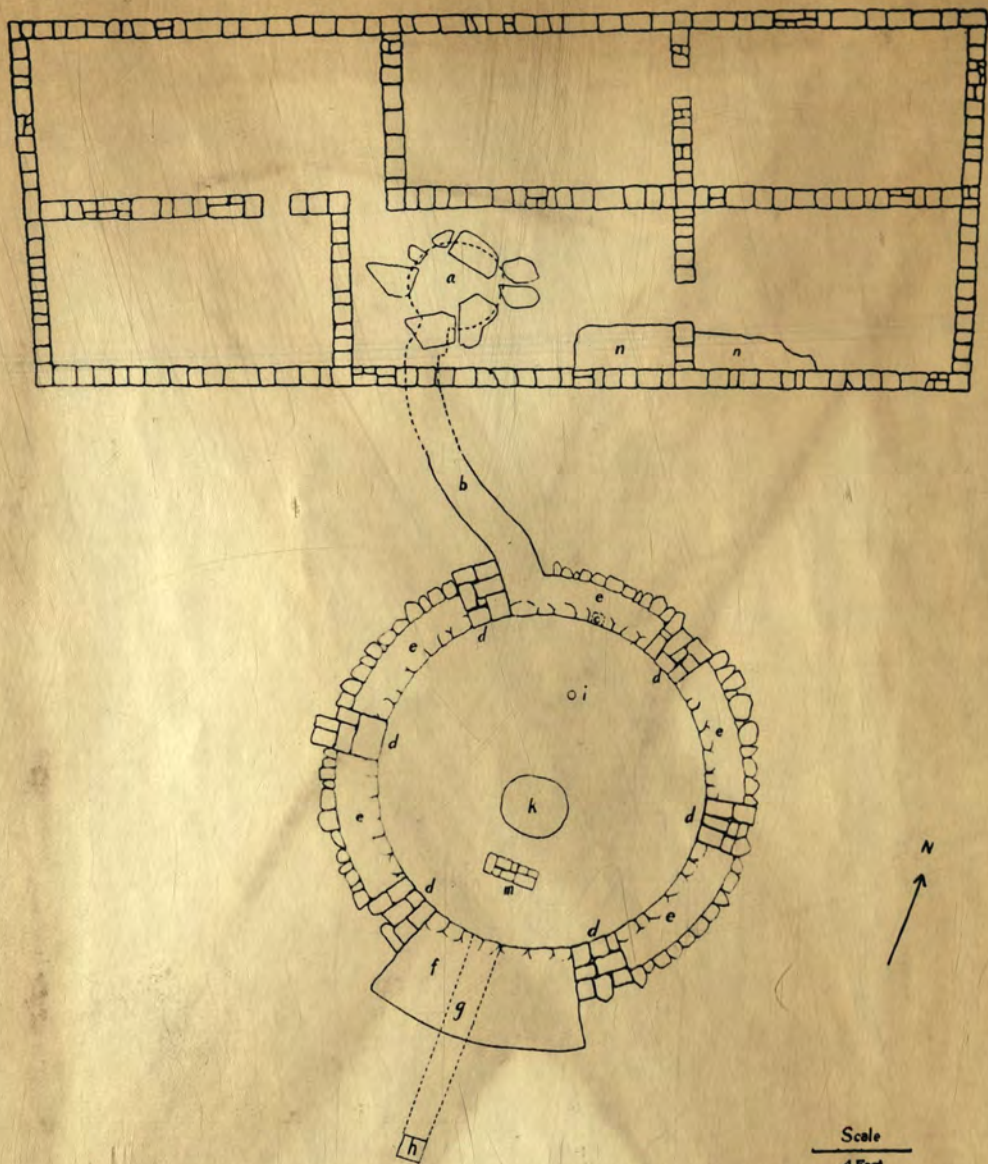


FIG. 5.—Ground plan of Ruin no. vi. on Squaw point. *a*, Manhole into tunnel to kiva. *b*, Underground tunnel from front room of pueblo to kiva. *c*, Cubby hole or niche in the north wall of kiva beneath banquette. *d*, Pilasters for the support of the roof timbers. *e*, Recesses between the pilasters with banquettes about 33 inches above the kiva floor level; the backs of these recesses, unlike those of fig. 1, are set with stones except in the southern recess. *f*, deep southern recess and banquette. *g*, Horizontal portion of the ventilator flue opening within at the floor level. Perpendicular shaft of the ventilator opening at the ground level. *i*, *Sipapu* in kiva floor. *k*, Fire pit in the floor. *m*, Stone wall deflector between the fire-pit and the ventilator opening. *n*, Stone benches possibly for meal purposes.

Figure 11. Prudden's Ruin No. VI.* Plan. Compare the kiva features to those of Ruin No. V (Figure 10).

* T. M. Prudden, "A Further Study of Small House Ruins...", Figure 5, p. 16.

thirty-three inches above the floor. Both kivas have southern "keyhole" recesses, the one in Ruin V being about six feet deep and the one in Ruin VI being about four feet deep. Both kivas have six stone masonry pilasters built on the bench and an underground passageway leading from the northern segment of the wall at the level of the bench to the center room of the nearer row of rooms.

Prudden's unit pueblos may be either Late Pueblo II or Transitional Pueblo II-III. In the description of the pottery from Ruin VI, Prudden mentions circular dots placed on bowl rims.⁴⁷ This form of decoration is mentioned by Abel for McElmo B/W,⁴⁸ but not for any of the Pueblo II types.⁴⁹ In addition, the standardized form of two kivas found about twelve miles apart is not typical of Pueblo II. Passageways, found in the four sites excavated in 1913⁵⁰ and the three sites excavated in 1915 have not been mentioned for any other excavated Pueblo II site.

⁴⁷T. M. Prudden, "A Further Study of Prehistoric Small House Ruins...", p. 24.

⁴⁸Leland J. Abel, in Harold S. Colton(ed.), "Pottery Types...", Ware 10B--Type 2.

⁴⁹Ibid., Ware 12A--Types 3, 4, and 5.

⁵⁰T. M. Prudden, "The Circular Kivas of Small Ruins in the San Juan Watershed," American Anthropologist, n. s., Vol. 16, 1914, cited in T. M. Prudden, "A Further Study of Prehistoric Small House Ruins..."

II. The San Juan Stem, Kayenta Branch

The Kayenta Branch of Northern Arizona covers the area bounded on the south by the Little Colorado River, on the west by the Colorado River, on the north by the San Juan River, and on the east by the Chinle Valley.⁵¹ There are indications that this Branch may extend into western New Mexico, but no definite material yet has been published on this.

Very little modern work has been published on the Kayenta Branch. The sites excavated by the Museum of Northern Arizona are on the border between the Kayenta Branch and the Sinagua Branch, while the sites excavated by the Rainbow Bridge-Monument Valley Expedition are in or near Tsegi Canyon in northern Arizona. Some Pueblo II trash mounds were excavated by Kidder and Guernsey in 1914 and by Guernsey in 1915, but no sites were excavated.⁵²

When the Museum of Northern Arizona began work in the Flagstaff area, the material was simply described as "Pueblo II." Since that time, sites in the area have been divided among a number of branches. Although it was originally believed that much of the material belonged to

⁵¹Harold S. Coulton, "The Sinagua...", p. 20.

⁵²A. V. Kidder, An Introduction to the Study of Southwestern Archaeology..., p. 76.

the Kayenta Branch, after Colton's new division of sites, very little is left to the Kayenta Branch. The following chart, taken partly from Hawley, 1936, lists pottery types formerly assigned to the Kayenta Branch, Pueblo II period and gives their present relationships:

POTTERY TYPE ⁵³	NEW BRANCH ⁵⁴
Deadman's B/W	Kayenta Branch (Black Mesa B/W)
Tusayan B/R	Kayenta Branch
Coconino Gray	Kayenta Branch
Deadman's Gray	Cohonina Branch
a. Deadman's Fugitive	Cohonina Branch
Red	
Rio de Flag Brown	Sinagua Branch
Sunset Red	Sinagua Branch
Tusayan Corrugated	Kayenta Branch
a. Deadman's Corrugated	Kayenta Branch (an early form, now combined with Tusayan Corrugated)
b. Moencopi Corrugated	Kayenta Branch

The Sinagua Branch, the dominant cultural group in the Flagstaff area, may be distinguished from any Anasazi branch by the brown or red pottery finished with

⁵³F. M. Hawley, "Field Manual of Prehistoric Southwestern Pottery Types," University of New Mexico Bulletin, Anthropological Series, Vol. 1, No. 4, p. 14.

⁵⁴H. S. Colton, "The Sinagua....," pp. 21, 22, 23, and 28.

the paddle and anvil technique. They seem not to have made decorated pottery, but to have imported it from their neighbors. Because of the scarcity of decorated pottery in the Flagstaff area, Colton uses undecorated pottery in assigning sites to Branches. He believes that utility pottery is less likely to be traded over a large area than is decorated pottery. Related pottery types are grouped together in "Index Wares."⁵⁵ The dominant Index Ware at a site determines the Branch to which the site will be assigned. The Index Wares, their associated branches, and their distinctive characteristics are given below.

1. Alameda Brown Ware--Sinagua Branch--Brown or red pottery finished by the paddle and anvil method.⁵⁶
2. San Francisco Mountain Gray Ware--Cohonina Branch--Gray pottery finished by the paddle and anvil method--made from residual clays of the Kaibab Limestone of the San Francisco Mountains.⁵⁷
3. Prescott Gray Ware--Prescott Branch--Gray pottery finished by either scraping or the paddle and anvil method. Made from residual clay from igneous rocks in the Prescott, Arizona area.⁵⁸

⁵⁵H. S. Colton, "The Sinagua...", p. 18.

⁵⁶Ibid., pp. 23-26; p. 255.

⁵⁷Ibid., pp. 28-31; p. 255.

⁵⁸Ibid., pp. 31-32; p. 255.

4. Tusayan Gray Ware--Kayenta Branch--Gray pottery finished by scraping--quartz sand temper.⁵⁹

From the descriptions given above, it can be seen that each of the wares is distinctive enough that, given a sufficient collection, no one ware could be mistaken for another.

The Black Mesa Phase.

The Pueblo II black-on-white pottery types of the Kayenta Branch are Black Mesa B/W, Sosi B/W and Dogoszhi B/W. All of these types are decorated with carbon paint. This paint is distinctive of the Kayenta Branch throughout most of Pueblo II. McElmo B/W, a carbon paint type, does not appear until late Pueblo II in the Mesa Verde Branch. Black Mesa B/W, dated by Colton at ca. 900- ca. 1100, is a distinctly Pueblo II pottery. Sosi B/W and Dogoszhi B/W, dated at ca. 1075-ca. 1130, like the Chaco Branch Gallup B/W, span the transition to Pueblo III.⁶⁰

In addition to the black-on-white types, there are two black-on-red types and one polychrome type. The earliest type, Deadmans B/R, is a Pueblo I-II form dating from ca. 800 to ca. 1060. It is most abundant between 900 and 1000. Tusayan B/R, a later type, runs into Pueblo III,

⁵⁹H. S. Colton, "The Sinagua...", pp. 26-28; p. 255.

⁶⁰Ibid., p. 251.

ca. 1050-ca. 1150. Citadel Polychrome dates from 1075 to 1175.⁶¹

The Pueblo II manifestation of the Kayenta Branch has been distinguished as the Black Mesa Phase.⁶² A number of sites of this phase were explored by Lyndon Hargrave during the 1933 Rainbow Plateau Expedition. Although no excavation was permitted, he was able to gain a good deal of information from surface indications. Pueblo II sites usually were found in the open. A few very late sites were found in caves. Pit houses were the standard architectural form early in the period. In Late Pueblo II, stone masonry surface units were found with pit houses.⁶³

The three sites of the Black Mesa Phase excavated in the Flagstaff area and the two sites excavated in the Tsegi Canyon area are discussed below.

The Flagstaff Area.

NA 1600.⁶⁴ NA 1600, located near Grand Falls, Arizona, about twenty miles northeast of Flagstaff, is a four room pueblo without an associated kiva or pit house. The masonry

⁶¹Harold S. Colton, "The Sinagua...", p. 252.

⁶²Ibid., p. 17.

⁶³Lyndon L. Hargrave, Report on Archaeological Reconnaissance in the Rainbow Plateau of Northern Arizona and Southern Utah (Berkeley: University of California Press, 1935), p. 46.

⁶⁴Harold S. Colton, "The Sinagua...", pp. 116-118.

consists of rough boulders. From the amount of stone on the site, the maximum wall height possible was estimated as 75 cm. All of the rooms have firepits, floor cists or pits, and postholes. The southernmost room is equipped with a deflector for one of its two firepits. The trash mound is east of the site. Black Mesa B/W is the dominant decorated pottery type at the site. Kana-a B/W, a Pueblo I type, and Deadmans B/R are present in much smaller quantities.

On the basis of the pottery analysis, Colton suggests an occupation period of ca. 850-950. He classifies the site as Marsh Pass Focus (Phase)-Black Mesa Focus (Phase).

The room with the deflector may have been the type of ceremonial room called a kihu by Fewkes.⁶⁵ If so, this might explain the absence of a kiva in a site inhabited for a hundred years.

NA 1600 was excavated by Walter Taylor, under the direction of John McGregor.

NA 1601.⁶⁶ NA 1601, also near Grand Falls, Arizona, is a one room surface structure. The rectangular room is constructed of blocks of sandstone and basalt. The walls are described as being 20 cm. high, but whether this is actual height or estimated maximum height is not stated.

⁶⁵A. V. Kidder, An Introduction to the Study of Southwestern Archaeology..., p. 69.

⁶⁶Harold S. Colton, "The Sinagua...", pp. 118-119.

The site was excavated by J. L. Angel, under the direction of John McGregor.

A much smaller pottery collection was made on this site. Since only 98 decorated sherds were found, actual numbers are substantially the same as percentages. Fourteen Kana-a B/W sherds, fifty Black Mesa B/W sherds, twelve Deadmans B/R sherds, and thirteen Kayenta B/W (Pueblo III) sherds were the major amounts found. Colton believes that this site, like NA 1600, was first occupied in the Pueblo I Marsh Pass Focus (Phase), with occupation continuing into the Black Mesa Focus (Phase). On the basis of ceramics, the site was occupied from 850 to 950. A short occupation early in the Black Mesa Phase seems more probable than Colton's estimate of a hundred year occupation, although the collection may represent a number of visits or very short occupations over a long period of time.

NA 1754, C and D.⁶⁷ (Figure 12) The Kayenta Branch portion of NA 1754 is a three room surface pueblo, NA 1754D, and a kiva, NA 1754C. The surface pueblo consists of two rooms oriented north-south, and a connected room on the east side of the south room. The south room has a firepit and a deflector. The east room has four roof-support posts, one in each corner, and a door opening east. The estimated maximum height of the walls is four feet. The walls are

⁶⁷Harold S. Colton, "The Sinagua...", pp. 128-131.

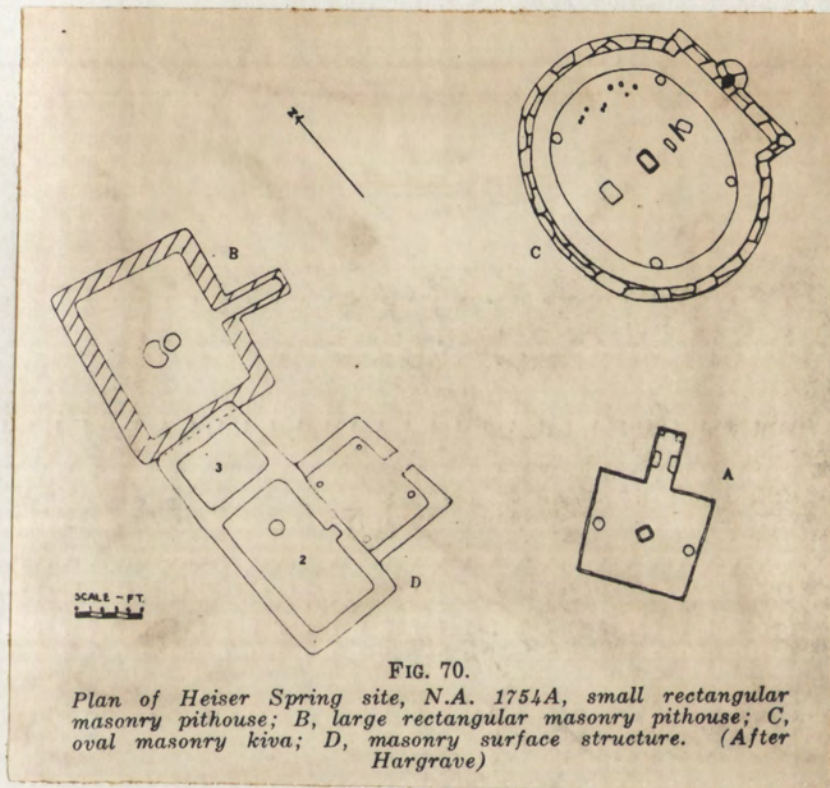


Figure 12. NA 1754.* Plan. Structures C and D comprise the Pueblo Black Mesa Phase component at the site.

*H. S. Colton, "The Sinagua...",
Figure 70, p. 120.

built of crudely coursed slabs and blocks.

The decorated pottery found in the surface unit consists of Sosi B/W and Tusayan B/R, both Pueblo II-III types, and Flagstaff B/W, a Pueblo III type.

The kiva is described as oval, though in some reports less circular structures have been described as circular. It is lined with stone masonry to ground level or higher. The masonry is similar to that of the pueblo, crudely coursed slabs and blocks. A bench with a slab top circles the kiva. There is a "keyhole" bench extension to the east (true east). Roof-support posts are set against the bench in the northeast, northwest, southeast, and southwest "corner" areas. From the east, aligned features are a floor cist, a slab deflector, a slab-lined rectangular firebox, and another floor cist. The western floor cist could conceivably represent a sipapu. The ventilator system is built into the bench and wall in the center of the bench extension. The site was excavated by Lyndon Hargrave.

Decorated pottery from the kiva consists of one Pueblo II type, Black Mesa B/W, and three Pueblo II-III types, Sosi B/W, Dogoszhi B/W, and Tusayan B/R.

Colton assigns NA 1754 C and D to the Pueblo III Klethla Focus (Phase) of the Kayenta Branch. On the evidence of the pottery, it could just as easily be assigned to a transitional position between the Black Mesa Phase and the Klethla Phase. In analysis, the pottery was weighed

rather than counted, a fact which makes exact comparison with types which were counted at other sites impossible.

Discussion of the Flagstaff Sites. All of the sites excavated by the Museum of Northern Arizona represent more than one phase, with the possible exception of NA 1601, which is too small to be of much value in making generalizations. Because of this situation, it is impossible to make any very valid generalizations about the Black Mesa Phase on the basis of excavations by the Museum of Northern Arizona.

The Tsegi Canyon Area.

In 1936, 1937, and 1938, Ralph L. Beals and Watson Smith of the Rainbow Bridge-Monument Valley Expedition excavated two Pueblo II (Black Mesa Phase) sites in the Tsegi Canyon area. Site RB 1006 is in Tsegi Canyon at the junction of the main canyon with Cobra Head Canyon. The other site, Site RB 551, is about five miles southeast of the mouth of Tsegi Canyon. The sites are described below in a relative sequence.

Site RB 1006.⁶⁸ (Figure 13) Site RB 1006 consists of two surface structures and four pit structures. Surface

⁶⁸Ralph L. Beals, George W. Brainerd, and Watson Smith, "Archaeological Studies in Northeast Arizona," University of California Publications in American Archaeology and Ethnology, Vol. 44, No. 1, 1945.

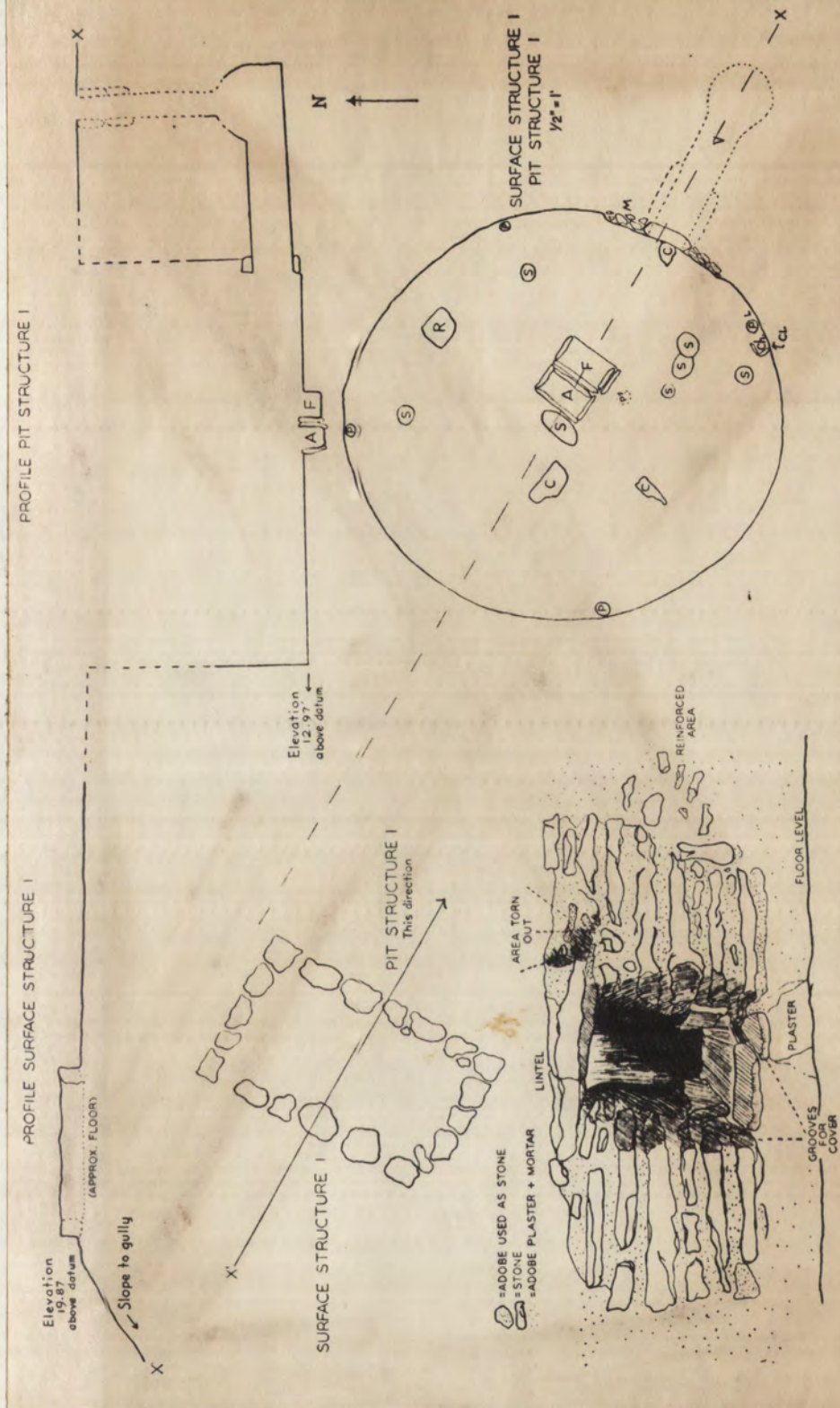


Fig. 3. Site RB 1006. Plan and profile of pit structure 1 and surface structure 1, and detail of masonry around ventilator opening, southeast wall, pit house 1-1006. A, ash pit; C, cover for ventilator; Ch., charcoal; F, fireplace; L, jarolite; M, masonry around opening to ventilator tunnel; P, postholes; R, flat rock with charcoal below; S, sand lenses beneath floor; V, ventilator tunnel; X'-X, line of profile (dotted lines indicate reconstruction).

Figure 13. Site RB 1006.* Plan and profile of the Black Mesa Phase component. These structures are a good example of the early stage of development in the Pueblo II period.

* R. Beals, G. Brainerd, and W. Smith, "Archaeological Studies...", Figure 3, p. 28.

Structure 1 and Pit Structure 1 comprise the Black Mesa Phase component of the site. The other structures are considered to belong to the Pueblo I period.

The one room surface structure is built "of large angular stones, poorly fitted and without evidence of mortar."⁶⁹ Two courses of stone remain in places. The maximum original height of the walls is estimated at between twenty-four and thirty inches. No well-defined floor was found. The room is about five feet wide by eight feet long.

The pit house is excavated in the sand of the fossil sand dune on which the site is built. The walls and floor are plastered with clay. The only stone masonry in the structure is a segment surrounding the ventilator opening. The stone slabs comprising the masonry segment are chipped to provide a groove for a cover. The cover, a stone slab, was found, broken, on the floor. Aligned features are a rectangular slab-lined firebox and a rectangular slab-lined ash pit. The firebox is nearest the ventilator opening. These two features occupy the same trench and share a common slab wall. Two clay ridges which may have been used for a pot rest are built on the floor against the southeast wall. Seven sand lenses containing charcoal and sherds were found beneath the undisturbed floor.

Black Mesa B/W is the predominate decorated pottery.

⁶⁹Ralph L. Beals, George W. Brainerd, and Watson Smith, "Archaeological Studies...", p. 30.

The pottery of this site is described as being an early variety of Black Mesa B/W, with "unusually wide lines, crude painting, and in designs more closely resembling those of Kana-a Black-on-white."⁷⁰ Other pottery types found are Lino Gray, Kana-a Gray, and a small amount of Deadmans B/R.

This site is assigned an early Pueblo II position.

Site RB 551.⁷¹ (Figures 14 and 15) Site RB 551 consists of a surface structure and a kiva. The four room surface structure contains a living room, a work room, and two storage rooms. A wall extending southeast from the end of the building may represent the remains of a room or a work area protected by a windscreen. The living room contains three firepits, two in the lowest floor and one in the uppermost floor. The work room contains two mealing bins, without metates, and a slab-lined floor cist. The walls, which are built of uncoursed sandstone blocks and slabs with adobe mortar, still stood up to four feet high at the time of excavation.

The circular kiva is lined with masonry similar to that of the surface structure. A low bench circles the kiva, but there is no "keyhole" bench extension. Aligned floor features are a slab deflector, a slab-lined subfloor

⁷⁰ Ralph L. Beals, George W. Brainerd, and Watson Smith, "Archaeological Studies...", p. 29.

⁷¹ Ibid., passim.

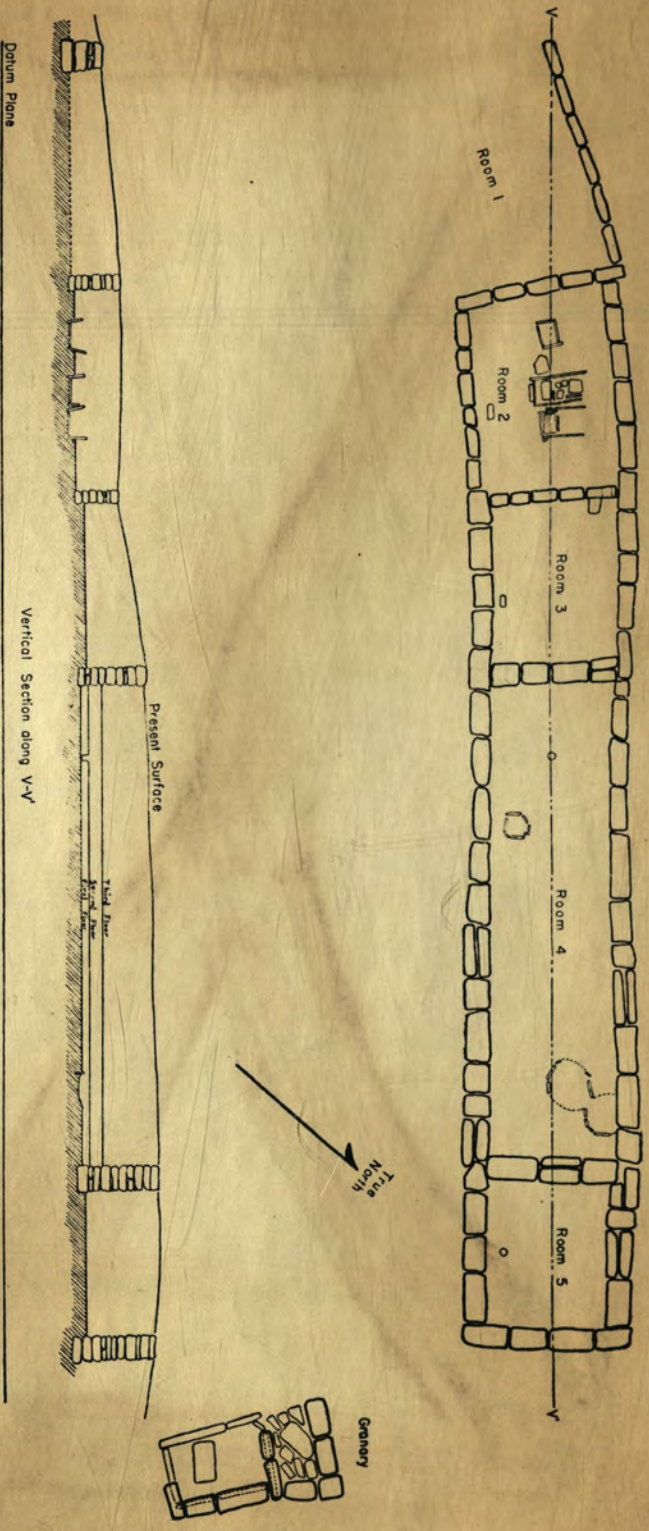


Fig. 8. Site RB 551. Plan and longitudinal section of surface structure 2, showing the floor features.

Figure 14. Site RB 551.* Plan and profile of the surface structure. Note the mealing bins in Room 2 and the fireplaces in Room 4. The kiva lies about twenty feet southeast of this structure.

*R. Beals, G. Brainerd, and W. Smith, "Archaeological Studies...," Figure 8, p. 47.

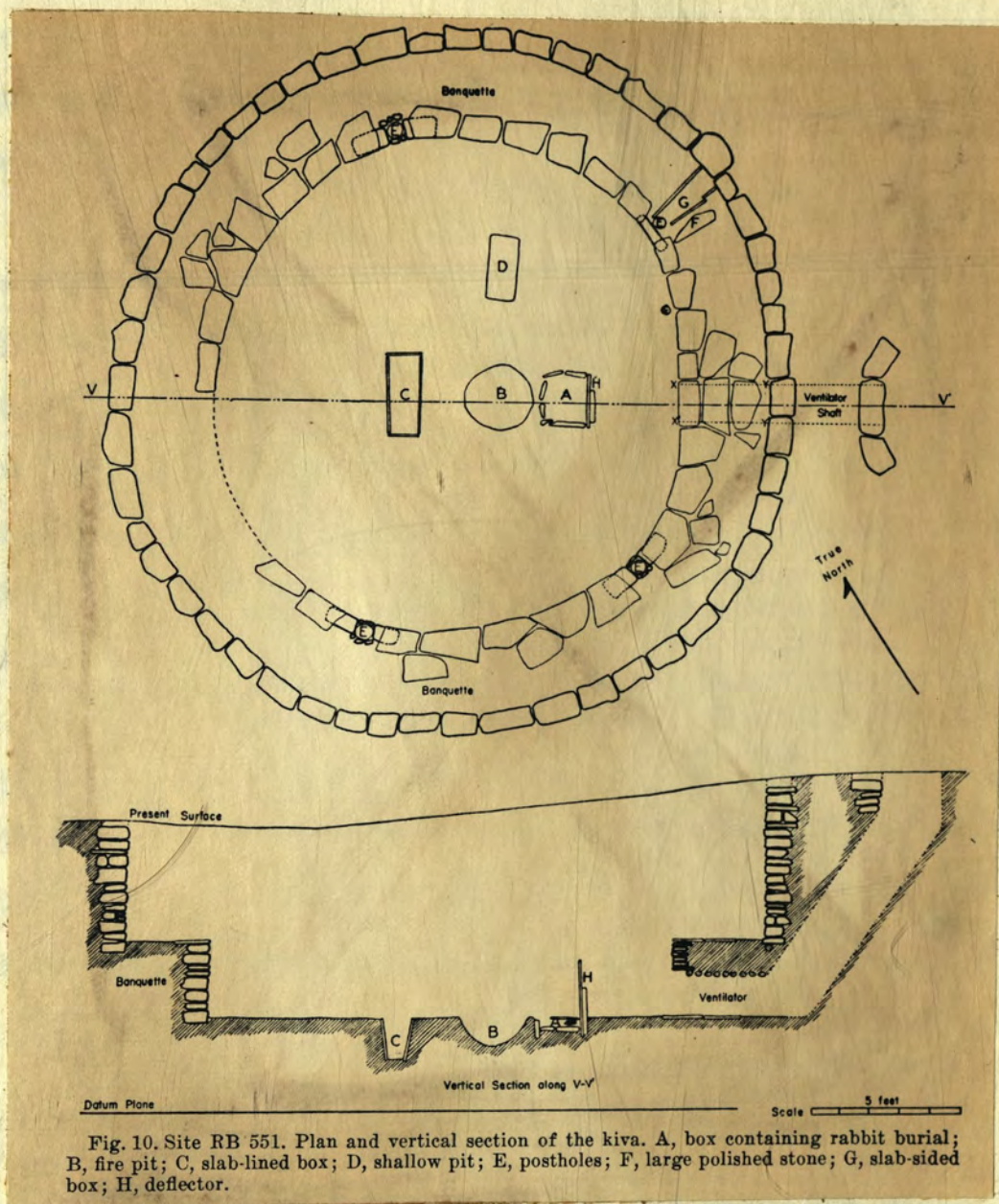


Fig. 10. Site RB 551. Plan and vertical section of the kiva. A, box containing rabbit burial; B, fire pit; C, slab-lined box; D, shallow pit; E, postholes; F, large polished stone; G, slab-sided box; H, deflector.

Figure 15. RB Site 551.* Plan and profile of kiva.

*R. Beals, G. Brainerd, and W. Smith, "Archaeological Studies...", Figure 10, p. 50.

cist containing a rabbit burial, a circular firepit, and a rectangular slab-lined floor cist. The only other feature present is a slab box built on top of the bench. Four roof-support posts are built into the edge of the bench.

The predominate pottery types in the surface structure and kiva are Pueblo II black-on-whites,⁷² Dogoszhi B/W, Tusayan B/R, Medicine B/R, and Tusayan Corrugated. The lowest two levels of a stratigraphic test showed a predominance of Kana-a B/W, Kana-a Gray, and Lino Gray, indicating a Pueblo I or Transitional Pueblo I-II occupation of the site. No structures were found which could be assigned to this period.

Beals, Brainerd, and Smith believe that Black Mesa B/W, Sosi B/W, and Dogoszhi B/W began at about the same time.⁷³ The Museum of Northern Arizona has dated the beginning of Sosi B/W and Dogoszhi B/W later than the beginning of Black Mesa B/W.⁷⁴

⁷²In the report on Site RB 551, Beals, Brainerd, and Smith combine all Pueblo II black-on-white types except Dogoszhi B/W.

⁷³Ralph L. Beals, George W. Brainerd, and Watson Smith, "Archaeological Studies...", Table 1, p. 19.

⁷⁴Harold S. Colton, "The Sinagua...", p. 251.

III. The Little Colorado Stem, Chaco Branch, Chaco District

The Phase distinctions of the Chaco District are the best defined and developed of any in the Anasazi Southwest. At the time Harold Gladwin published on the Chaco District,⁷⁵ he thought that he was describing the archaeology of a larger area. At the present time, the boundaries of the Chaco District are in a state of flux. For the present, the area of the Chaco District will be considered to be the drainage of the Chaco River, with a southern extension into the upper valley of the Rio Puerco of the West. Gladwin's Phases for the Chaco District are considered below.

The Red Mesa Phase (Figure 16)

Estimated dates: 870-930.

Tree-ring dates: 879-927+ .

Area: The Chaco District,⁷⁶ the Cibola District,⁷⁷ and the Upper San Jose District.

⁷⁵Harold S. Gladwin, "The Chaco Branch, Excavations at White Mound and in the Red Mesa Valley," Medallion Papers, No. 33, 1945.

⁷⁶Ibid., pp. 49-66.

⁷⁷E. B. Danson, "An Archaeological Survey of West Central New Mexico and East Central Arizona," Papers of the Peabody Museum of Archaeology and Ethnology, Harvard University, Vol. 44, No. 1, 1957, p. 23.

Architecture:

Surface structures: Two or three rectangular surface rooms, in a block or separate, with walls of adobe, alone or reinforced with poles, wattle and daub, adobe reinforced with sandstone chips, and low walls of coursed stone masonry capped by shaped sandstone slabs. Stone masonry walls serve as foundations for jacal upper walls. Houses seldom contain firepits. Firepits are found outside the rooms, sometimes protected by windcreens.

Subsurface structures: Kivas (?) are deep, about two meters, and contain firepit, ash pit, slab deflector, sipapu, and floor pits and cists. Ventilator shafts and tunnels are sometimes lined with stone masonry. Roofs are supported by posts set along the walls. Although Gladwin states that benches had "become an established feature,"⁷⁸ no benches were found in the Red Mesa Phase sites he excavated.⁷⁹ The kivas (?) were round in all cases.

Pottery complex:⁸⁰

Decorated types: Red Mesa B/W, Escavada B/W, Gallup B/W (?), and Deadman's B/R.

⁷⁸Harold S. Gladwin, "The Chaco Branch...", p. 65.

⁷⁹Ibid., Fig. 11, p. 51; Fig. 12, p. 52; Fig. 13, p. 54.

⁸⁰Florence M. Hawley, in Clyde Kluckhohn and Paul Reiter (eds.), "Preliminary Report on the 1937 Excavations, Bc 50-51, Chaco Canyon, New Mexico," University of New Mexico Bulletin, Anthropological Series, Vol. 3, No. 2, 1939.

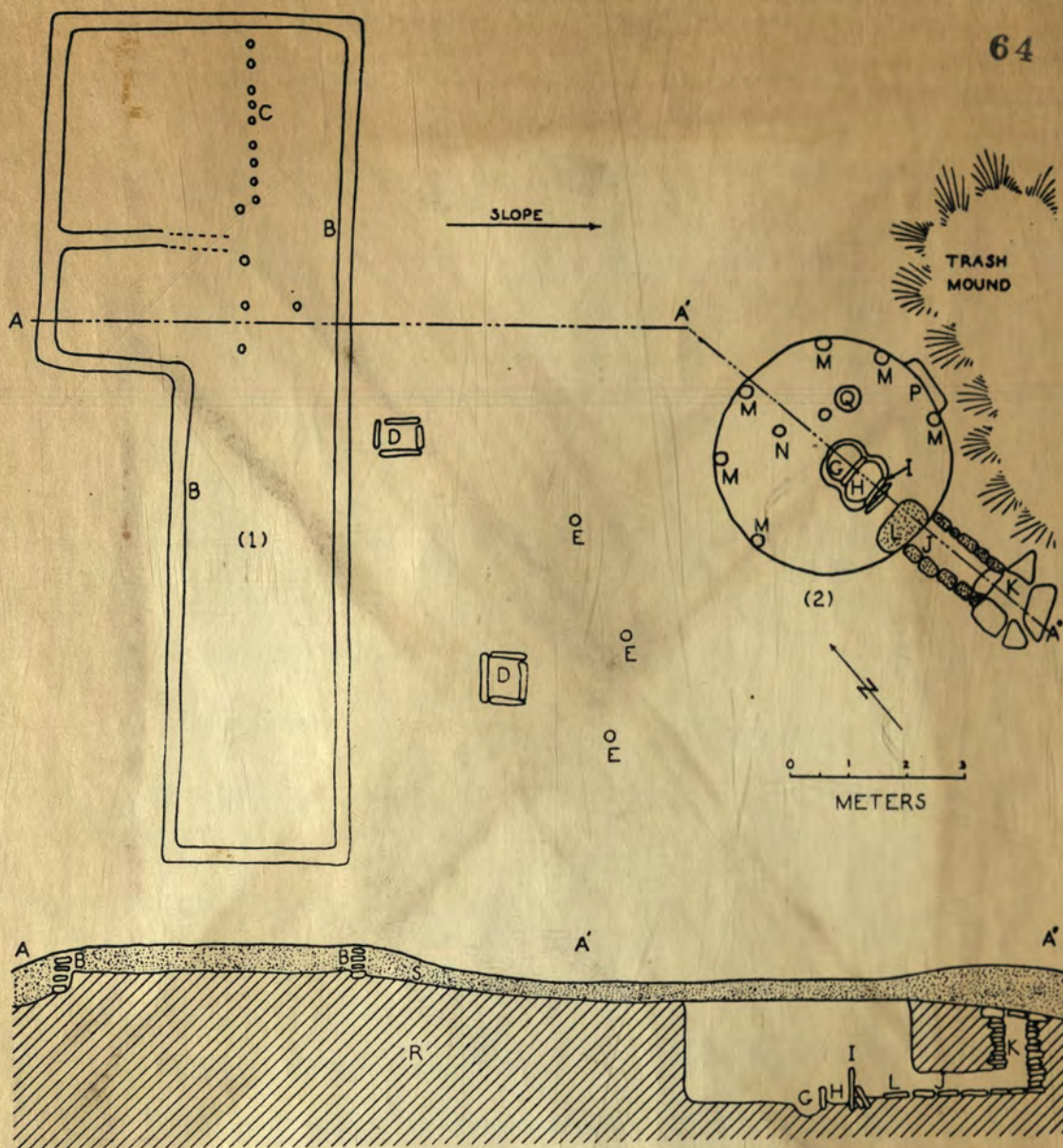


FIG. 13. WINGATE: 11:60

1. *House Group*. B, walls 50 cm. high, of slabs laid in adobe; C, partition walls of posts and adobe; D, outside fire-pits, slab-lined; E, post-holes of brush shelter.
2. *Kiva*. G, firepit outlined by a clay rim; H, ashpit; I, deflector; J, horizontal section of ventilator shaft; K, vertical opening, both horizontal and vertical sections lined with slabs; L, ventilator cover, resting on floor; M, roof support post-holes; N, sipapu; P, recessed bench; Q, pit; R, native soil; S, rubbish.

Figure 16. Wingate: 11: 60.* Plan and profile. This is Gladwin's type for the Red Mesa Phase. The partial bench, "P," in the pit house is the only such feature found by Gladwin in any of his Red Mesa Phase sites.

*H. S. Gladwin, "The Chaco Branch...", Figure 13, p. 54.

Utility types: Lino Gray, Exuberant Corrugated,
Kana-a Gray.

Excavated sites:

Wingate: 11: 47,⁸¹49 and : 60⁸²

Leyit Kin, Unit I, the subsurface rooms and kiva.⁸³

LA 2655.⁸⁴

Bc 50, Substructures.⁸⁵

LA 6383, Unit I.⁸⁶

LA 6469.⁸⁷

LA 6400.⁸⁸

⁸¹The Gila Pueblo system of numbering sites is based on the name of the map quadrangle, position within the quadrangle, and order of discovery.

⁸²H. S. Gladwin, "The Chaco Branch...", passim.

⁸³B. Dutton, "Leyit Kin, a Small House Ruin in Chaco Canyon, New Mexico," Monographs of the School of American Research, 1938.

⁸⁴A. P. Olson and W. W. Wasley, "An Archaeological Traverse Survey in West-Central New Mexico," in F. Wedorf, N. Fox and O. L. Lewis, (eds.) Pipeline Archaeology, Laboratory of Anthropology, Santa Fe and Museum of Northern Arizona, Flagstaff, 1956.

⁸⁵F. C. Hibben, "Tseh So, A Small House Ruin, Chaco Canyon, New Mexico," University of New Mexico Bulletin, Anthropological Series, Vol. 2, No. 2, 1937, pp. 81-84; Nan Glenn, in C. Kluckhohn and P. Reiter (eds.), "Bc 50-51...", 1939, pp. 166-174.

⁸⁶R. Salzer and R. Lane, "LA 6383, Prairie Dog Pueblo," in J. E. Smith (ed.), Highway Salvage Archaeology in the Prewitt District, Laboratory of Anthropology, Santa Fe, in press.

⁸⁷S. D. Bussey and G. De Cicco, "LA 6469, The Cueva del Perro Site," in J. E. Smith, ibid.

⁸⁸G. De Cicco and D. Leary, "LA 6400, The Windmill Site," in J. E. Smith, ibid.

The Wingate Phase (Figure 17)

Estimated dates: 930-1000.

Tree-ring dates: 921+ -1011.

Area: Chaco District,⁸⁹ Cibola District,⁹⁰ Upper San Jose District (rare and probably intrusive).⁹¹

Architecture:

Surface structures: A continuation of the Red Mesa Phase architecture in that adobe walls strengthened with sandstone flakes and low masonry walls capped with thin shaped sandstone slabs is used. Gladwin considers these to have come early in the phase. Later, coursed or uncoursed masonry walls extend to the full height of the surface structure. Although Gladwin states that Wingate Phase houses "rarely consist...of more than six rooms,"⁹² two of the three Wingate Phase sites he excavated have seven rooms and the third, Wingate: 11: 53, probably should be classified as Late Red Mesa Phase. Wingate Phase rooms are congregated in a small pueblo block. Although outside firepits are still present, some rooms have firepits,

⁸⁹H. S. Gladwin, "The Chaco Branch...", passim.

⁹⁰E. B. Danson, "An Archaeological Survey...", p. 23.

⁹¹A. P. Olson and W. W. Wasley, "An Archaeological Traverse Survey...", p. 331.

⁹²H. S. Gladwin, "The Chaco Branch...", p. 73.

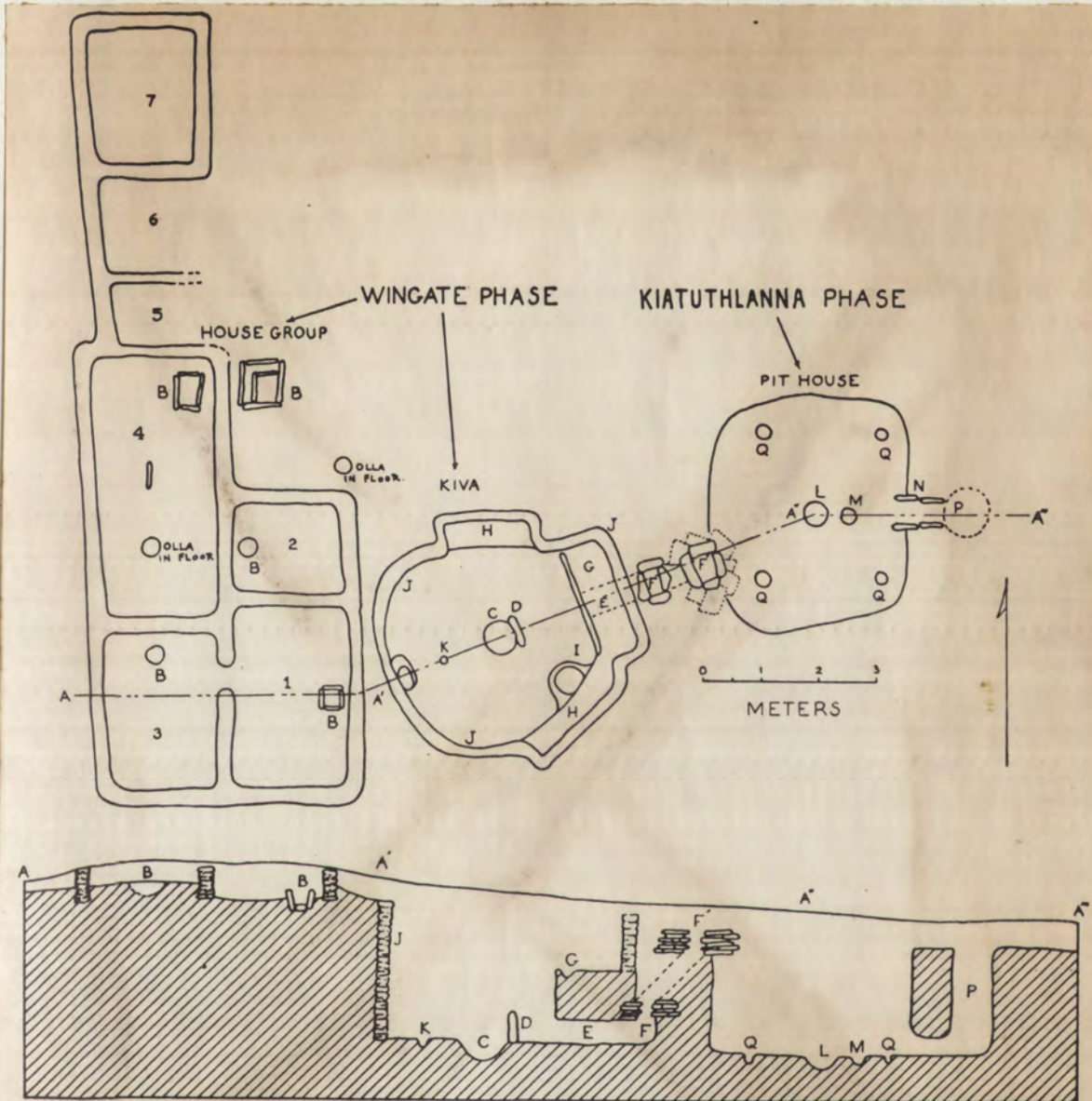


FIG. 15. WINGATE : 11 : 24

House Group: Surface rooms with walls of coursed masonry, laid in adobe; Rooms 1 and 4 each had a slab-lined firepit; B, a slab-lined firepit just outside of Room 4 was originally 66×64 cm.—later reduced, as shown, to 40×50 cm.

Kiva: C, circular firepit; D, deflector; E, horizontal portion of ventilator shaft; F, lower vertical section of ventilator shaft, lined with slab masonry; F', offset upper vertical section also lined with slab masonry and cut into the wall of a Kiatuthlanna pit-house; G, altar, the edge of the shelf terminating in a round timber as shown by impression in the plaster; H, recessed benches; I, cist, bordered by a low rim of clay; J, coursed slab masonry, covered with plaster, approximately 2.5 cm. thick, on all walls to a height of about 1 meter above the floor; K, sipapu; open end trough metate on floor at west wall.

Kiatuthlanna pit-house: L, circular firepit, consisting of a shallow depression in the floor; M, ashpit, similar to L, but smaller; N, slab lining to horizontal section of ventilator shaft; P, vertical section of ventilator shaft; Q, post-holes.

Figure 17. Wingate: 11: 24.* Plan and Profile. This is the type site of the Wingate Phase.

*H. S. Gladwin, "The Chaco Branch...", Figure 15, p. 70.

indicating that surface rooms were lived in throughout the year.

Subsurface structures: The single kiva excavated is lined with coursed slab masonry. The kiva is described by Danson⁹³ as "D"-shaped. Three bench sections exist, one on the flat side of the kiva and one on each side of the center bench. The three bench sections give the impression of clover leaves partially hidden by a coin (the main room of the kiva). Features include a sipapu, a firepit (circular in the single kiva Gladwin excavated, but roughly rectangular in Olson and Wasley's LA 2675), a slab deflector, and a ventilator shaft with masonry lining above the junction of the tunnel and shaft at the surface. The kiva at the type site has both a vertical ventilator shaft and a diagonal ventilator shaft. This is probably not typical.

Pottery complex:⁹⁴ Wingate B/R, Gallup B/W,⁹⁵ and Corrugated-indentated.

Excavated sites:

Wingate: 11: 53 (This may be Red Mesa Phase).⁹⁶

⁹³E. B. Danson, "An Archaeological Survey...", p. 23.

⁹⁴H. S. Gladwin, "The Chaco Branch...", passim.

⁹⁵Gladwin's description of the surface treatment, "surface smoothed but not polished," suggests Escavada B/W rather than Gallup B/W. H. S. Gladwin, "The Chaco Branch...", p. 71.

⁹⁶H. S. Gladwin, "The Chaco Branch...", passim.

Wingate: 11: 20.⁹⁷

Wingate: 11: 24 (Type site).⁹⁸

LA 2675.⁹⁹

The Hosta Butte Phase

Estimated dates: 1010-1080.

Tree-ring dates: 922+ (1014)-1077 .

Architecture:

Surface structures: Up to twenty to thirty rooms in one or two stories seems to be typical. The walls are of stone masonry, described as "small blocks surrounded with small spalls or potsherds in abundant mortar."¹⁰⁰

Published photographs seem to indicate that coursing was attempted in some cases,¹⁰¹ but not in all. Neither lower nor upper limits of room number are known. Rooms in the three excavated sites of this phase are arranged along a general north-south axis.

Subsurface structures: Three to six or more kivas of various types, detached or intramural are present. Kiva features are noted in Table IV.

97H. S. Gladwin, "The Chaco Branch...", passim.

98Ibid.

99A. P. Olson and W. W. Wasley, "An Archaeological Traverse Survey...", passim.

100F. M. Hawley, in D. Brand, F. Hawley, and F. Hibben, et al., "Tseh So...", p. 88.

101D. Brand, F. Hawley, F. Hibben, et al., "Tseh So...", Plates Ib, VI, VIIb and c, and VIIIb; B. Dutton, "Leyit Kin...", Plates XIa, XII, XVa, XVIIb, and XVIIIb.

SITE	KIVA NO.	BENCH	RECESS	PILASTERS	FIREPIT	SIPAPU	DEFLECTOR--TYPE
Leyit Kin	A	yes	no	6	yes	no	none
	B	yes	yes	4	yes	no	slab
	D	yes	no	4(?)	?	?	?
Bc 50	1	yes	yes	no	yes	no	Stone masonry arc enclosing ventilator area
	2	yes	no	no	yes	yes(?)	Stone masonry arc enclosing ventilator area
	3	yes	yes	4	yes	yes	Both a slab reflector and a rectangular stone masonry deflector
	4	yes	no	no	yes	no	Rectangular stone masonry
Bc 51	1	yes	yes	4	yes	no	Stone masonry
	2	yes	no	2	yes	yes	Slab
	3	yes	no	4plus	no	no	None
	4	yes	no	no	?	?	?
	5	yes	no	no	?	?	?
	6	yes	yes	no	yes	no	Stone masonry

TABLE IV

KIVA FEATURES IN HOSTA BUTTE PHASE SITES

Pottery complex:Local types:

Utility types: Lino Gray (BM III),
Kana-a Gray (P I), Tseh So Corrugated, and Chaco Corrugated.

Decorated types: Red Mesa B/W, Escavada B/W,
Gallup B/W, Chaco B/W, and Wingate B/R.

Trade types: Tusayan Polychrome (Kayenta Branch),
McElmo B/W (Mesa Verde Branch),¹⁰² Mesa Verde B/W (Mesa Verde
Branch).

Excavated Sites:

Bc 50.¹⁰³

Bc 51.¹⁰⁴

Leyit Kin.¹⁰⁵

Discussion of the Phases of the Chaco District

In "The Chaco Branch," Gladwin defined two Pueblo II phases and an early Pueblo III phase, as well as both earlier and later phases which are not pertinent here.

In the author's opinion, the Red Mesa Phase should be considered Transitional Pueblo I-II. The surface structures seem to have been primarily storage spaces, with actual occupation in the subterranean structures at least part of the year. Pueblo I pottery types are heavily represented

¹⁰²McElmo B/W may have been manufactured locally.
F. M. Hawley, in C. Kluckhohn and P. Reiter (eds.), Bc 50-51,
p. 52.

¹⁰³D. Brand, F. Hawley, F. Hibben, et al., "Tseh So....,"

¹⁰⁴C. Kluckhohn and P. Reiter, Bc 50-51, 1939.

¹⁰⁵B. Dutton, "Leyit Kin....," 1938.

in the early sites. For example, at Wingate: 11: 47, almost as many neck-banded (Kana-a Gray) sherds as corrugated sherds were found. Kiatuthlanna sherds are present in some of the sites, e. g., Wingate: 11: 60, but Gladwin gives no percentages.

The Wingate Phase represents the classic definition of Pueblo II, small-house units which were lived in and ceremonial structures, kivas, which were probably not lived in.

The Hosta Butte Phase should be considered Transitional Pueblo II-III. Gladwin classified the phase as Pueblo III because of the presence of McElmo B/W, a Pueblo III type, but he ignored the fact that much of the pottery at Bc 50 and Bc 51 was either Pueblo II (Escavada B/W) or Pueblo II-III (Gallup B/W). Gladwin bases his period assignments on the absolute presence or absence of traits. If some Pueblo III pottery is found, but most of the pottery is Pueblo II, then the site is Pueblo III. This attitude and an unwillingness to admit the transitional nature of much of his material seems to be the reason why he does not classify some of his phases, or at least some of his sites, as transitional.

IV. Problem One: Conclusions

It appears from this material that Pueblo II sites of the Mesa Verde, Kayenta, and Chaco Branches can be divided into three general types. When sites of the period have been so divided, the divisions are called Stages. In the terminology used in this paper, the manifestation of a Stage within a Branch of culture and found to be characteristic of a certain geographic area is known as a Phase. The Phase is thus defined by traits, and exists as a culture-space-time complex.

There is insufficient evidence for the establishment of separate phases of the Pueblo II period where no real differences in pottery exist. The use of architectural differences alone in making phase distinctions is dangerous because of the great amount of architectural variation which exists. In future excavations, it should be possible to distinguish two Pueblo II phases in the Mesa Verde District by the use of Abel's 1955 pottery definitions. A division into two phases before Abel made his subdivision of Mancos Black-on-white would have been impossible because too few sites had been excavated to outline the actual range of architectural types. The three sites excavated by O'Bryan and Lancaster and Pinkley on the Mesa Verde National Park were chosen for excavation because they appeared to be typical of the Pueblo II period. If a random selection of

sites had been excavated, the sequence of architectural types presented for the Mesa Verde District earlier in this thesis probably would not have been possible.

Whatever Branch and District they represent, the sites in the early Stage of Pueblo II, represented by various phases, should be similar to sites of the Red Mesa Phase, the early stage Pueblo II sites best described in the literature to date. This early stage is characterized by pit houses accompanied by surface storage structures, with Pueblo I pottery types well represented. These pottery types fade out later as typical Pueblo II pottery types increase. Pit houses and surface storage structures are sometimes accompanied by kivas, as seems to be the case in the Upper San Jose District. This stage may be considered Transitional Pueblo I-II.

The later stage apparently is characterized by stone masonry or jacal surface dwellings and storage structures, accompanied by kivas and/or pit houses. Pottery types such as Gallup B/W and Sosi B/W are present. Sites which appear unchanged architecturally from the typical plan of the early stage, but which may contain the pottery complex of the later stage, occur.

The third stage, which has been largely ignored in this thesis, is a Transitional Pueblo II-III stage. The

urban emphasis of sites of this stage, such as the Lowry Ruin, near Pleasant View, Colorado, and Site 34 at the Mesa Verde National Park, is more typical of the Pueblo III period than of the Pueblo II period.

CHAPTER IV

PROBLEM TWO: THE CHACO BRANCH
UPPER SAN JOSE DISTRICT

I. Definition of Problem Two

Problem Two may be considered in two parts. The first covers the establishment of the identity of the Upper San Jose District as a separate district of the Chaco Branch. The second covers the definition of phases for the district and the placement of excavated sites within the phases.

II. The Upper San Jose District

Before 1950, no sites in the Upper San Jose Valley had been excavated. In that year, the El Paso Natural Gas Company financed an archaeological survey of the right-of-way of their Permian-San Juan Pipeline. Alan P. Olson and William W. Wasley surveyed the sixty foot right-of-way through west-central New Mexico and excavated sites which were to be destroyed by the pipeline trench. Their survey and excavations indicated that the division between the Acoma Branch and what they called the "Puerco area of the Chaco Branch" was in the vicinity of Bluewater, N. M.¹⁰⁹ At about that point, the Acoma pottery types, Socorro B/W

¹⁰⁹A. P. Olson and W. W. Wasley, "An Archaeological Transverse Survey....," p. 271.

and Chupadero B/W yielded predominance to Escavada B/W and Gallup B/W.

Olson and Wasley excavated five Pueblo II sites between Bluewater, N. M., and Gallup, N. M., and located a number of others in their survey. Three of the excavated sites were assigned to the Red Mesa Phase and two to the Wingate Phase.

As a result of the work on the Wingate Products Line running north from Gallup, N. M., to Bloomfield, N. M., Wendorf and Lehmer suggest that the Wingate Phase is not a Pueblo II manifestation and that it does not belong in the development of the Chaco District. The only bark date found in association with Wingate B/R in one of their sites was 1047. In addition, one site excavated on the Wingate Products Line about twenty miles west of Pueblo Bonito produced more McElmo B/W than any other decorated pottery type. A few sherds of Wingate B/R were found in levels with McElmo B/W. In another site, about twenty miles south of the first and about twenty-three miles northeast of Fort Wingate, N. M., McElmo B/W was the second most common decorated pottery. Wingate B/R was about one-half as common as McElmo B/W. Wendorf and Lehmer state that McElmo B/W has been dated at 1050 in the Mesa Verde District, and that Wingate B/R and McElmo B/W should be regarded as contemporaneous.²

²Abel gives ca. 1130 as the beginning. L. J. Abel, in H. S. Colton, "Pottery Types of the Southwest," 1955.

McElmo B/W cannot be exactly dated in Chaco Canyon. It is present in most of the rooms and kivas of Bc 51 and was found in association with most of the pottery types found at the site.³ The only tree-ring dates from the site are 1043 and 1077 + (1-10). The later date is believed to represent repair work.⁴ Room 7, in which the dated beams were found, is considered one of the more recent structures on the site.⁵

The following dated Kayenta Branch pottery types were found in association with McElmo B/W:

Deadmans B/R, ca. 800-ca. 1060.⁶

Black Mesa (Deadmans) B/W, ca. 900-ca. 1100.⁷

Tusayan Polychrome, old definition, now divided into⁸

Tusayan Polychrome (1150-1300).

Citadel Polychrome (1075-1175).

Sunset Red, a Sinagua Branch type dated at ca. 1075-ca. 1250,⁹ was also found with McElmo B/W.

³C. Kluckhohn and P. Reiter, "Bc 50-51...", Table 2.

⁴Ibid., p. 43.

⁵Ibid., p. 44.

⁶H. S. Colton, "The Chaco Branch...", p. 252.

⁷Ibid., p. 251.

⁸Ibid., passim.

⁹Ibid., p. 253.

The major Chaco District pottery types found with McElmo B/W are Chaco B/W, Gallup B/W, Escavada B/W, Red Mesa B/W, Wingate B/R, Chaco Corrugated, and Tseh So (Exuberant) Corrugated. The largest percentage of Chaco B/W found in Bc 51, 6%,¹⁰ is smaller than the percentage of Chaco B/W found in the lowest stratum of the Chetro Ketl dump, 33.2%.¹¹ The smallest percentage of Chaco B/W found in the dump, 14%, came from Stratum 2, a stratum of mixed trash.¹² No tree-ring dates were obtained from Stratum 1, and only one from Stratum 2. This date, 1060+ (est. 1090), was from the upper portion of the stratum.¹³

The introduction of McElmo B/W was one of Gladwin's criteria for the Hosta Butte Phase. Wendorf and Lehmer believe that the Wingate and Hosta Butte Phases should be considered contemporaneous early Pueblo III phases. In order to postulate a "Puerco Branch,"¹⁴ Late Pueblo II

¹⁰C. Kluckhohn and P. Reiter, "Bc 50-51...", Table 2.

¹¹F. M. Hawley, "The Significance of the Dated Pre-history of Chetro Ketl, Chaco Canyon, New Mexico," University of New Mexico Bulletin, Monograph Series, Vol. 1, No. 1, 1934, p. 52.

¹²Ibid., p. 54.

¹³Ibid., pp. 52 and 54.

¹⁴F. Wendorf and D. J. Lehmer, "Archaeology of the Wingate Products Line," in F. Wendorf, N. Fox, and O. L. Lewis (eds.), Pipeline Archaeology, Laboratory of Anthropology, Santa Fe, and Museum of Northern Arizona, Flagstaff, 1956, p. 194.

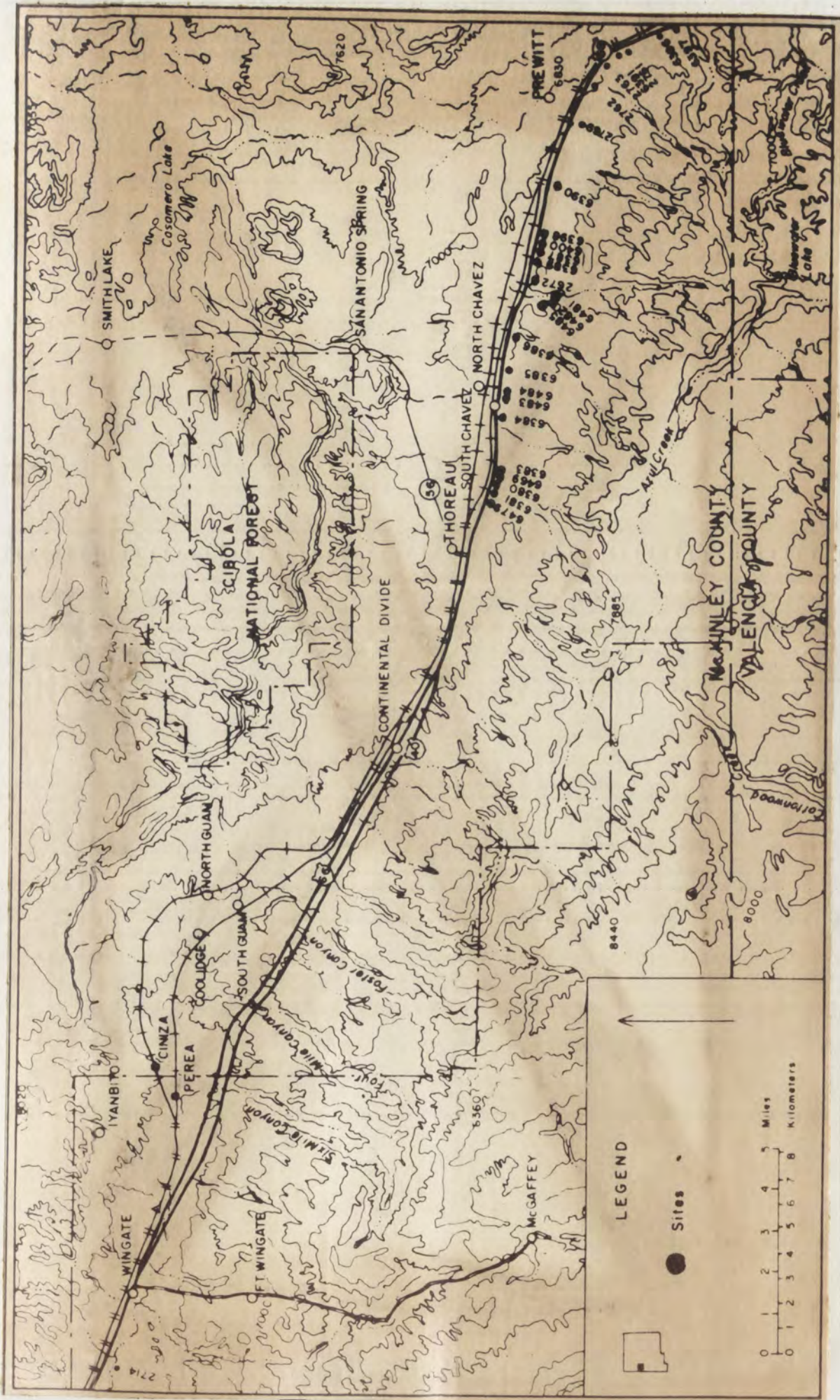


Figure 18. Excavated sites in the Upper San Jose District.*
 *J. E. Smith, "Highway Salvage Archaeology...", in press.

phases in both the Puerco and Chaco Branches are left unnamed.

In the summer of 1962, four crews from the Laboratory of Anthropology began a salvage project on the right-of-way of U. S. Interstate Highway 40, now under construction. This new highway lies just south of U. S. Highway 66. The four crews were under the general supervision of Alfred E. Dittert. James Sciscenti acted as field supervisor for the early part of the summer until the arrival of Jack E. Smith, who originally had been hired for the project. The initial phase of the project involved the excavation of sites between Prewitt, N. M., and Thoreau, N.M., and one at the Fort Wingate Ordnance Depot. Twenty-two Pueblo II sites were excavated and the trash mound of a twenty-third was explored.

On the basis of a site survey made by Robert K. Alexander and Blake Benham of the Laboratory of Anthropology's Highway Cultural Inventory Project, it was believed that most of the sites belonged to the unnamed Late Pueblo II Phase postulated by Wendorf and Lehmer in 1956. The pottery types expected were Red Mesa B/W, Escavada B/W, Gallup B/W and Puerco B/W.

Because all of the archaeologists hired for the project were students who were available only for the summer and because any site not excavated by the fall of 1962 would be destroyed, a separate laboratory was set up in Santa Fe to process all sherds and artifacts. Lyndon Hargrave

was in charge of this laboratory. Because of the confusion surrounding the definitions of the Pueblo II pottery types of the Chaco District, it was decided that Hargrave's first job was to define exactly the types involved.

In Pipeline Archaeology, Wendorf and Lehmer had redefined Escavada B/W and Gallup B/W on the basis of design. Escavada B/W was redefined as "that pottery which had a broad line decoration (Sosi style)."¹⁵ Gallup B/W and Chaco B/W were combined under the name Gallup B/W and defined as "those vessels with hatched designs (Dogoszhi style)."¹⁶ Hawley's original definition was based primarily on the degree of polish rather than solely on design elements.¹⁷

By the use of published material and the sherd collections of the Laboratory of Anthropology, Hargrave decided that Hawley's definitions were correct. Having settled this problem, he began the classification of the material from the Prewitt Interstate 40 project sites. At this point, he decided that the Prewitt material was neither Escavada B/W nor Gallup B/W, but something different. He named and described five new types, two slipped and three unslipped.¹⁸ The two new slipped types, Grants B/W and

¹⁵F. Wendorf and D. J. Lehmer, "...Wingate Products Line...", p. 161.

¹⁶Ibid., p. 161.

¹⁷F. M. Hawley, "Field Manual...", pp. 32-33; 42-44.

¹⁸See Appendix B.

Prewitt B/W, are similar to Escavada B/W and Gallup B/W, but are distinguished from them on the basis of the color and thickness of the slip and the color of the paint. The Chaco types, Escavada B/W and Gallup B/W, have a thinner whiter slip and blacker paint.¹⁹

The unslipped types of the Prewitt area, Bluewater B/G, Las Tusas B/G and San Jose B/G, are similar in design, finish and sequence to Red Mesa B/W, Grants B/W, and Prewitt B/W.

No site excavated during the 1962 season could be classified as belonging to Wingate Phase and only one site excavated in the Upper San Jose Valley during the pipeline work could be so classified. Two sites belong to the Red Mesa Phase and a component at another site is of Red Mesa Phase. At the time of excavation, the rest appeared to belong to Wendorf and Lehmer's Puerco Late Pueblo II Phase.

There does not seem to be sufficient evidence in the material from the Interstate 40 excavations to merit the creation of another Branch. Perhaps the material is distinctive enough that it should be designated as belonging to a separate district of the Chaco Branch. This district, for which the name Upper San Jose District is suggested, is assigned to the Chaco Branch because it seems to have the closest connection with that Branch. Except for the differences in paint and slip, the pottery is very similar.

¹⁹See Appendix B.

The sequence of analagous types is the same, although the Grants-Prewitt types have not yet been dated. Both the new district and the Chaco District have Late Pueblo II phases derived from the Red Mesa Phase.

Other Branches to which the culture of this district conceivably might be related are Acoma to the east, Cibola to the south, and Kayenta to the west. The Acoma Branch is eliminated because of the lack of similarity in pottery; the unslipped types of the Upper San Jose District are not similar to the diagnostic Socorro B/W of the Late Pueblo II period in the Middle Rio Grande Valley. The lack of the brown utility pottery (Alma Rough, Alma Plain, and Alma Textured) so characteristic of the Pueblo II Reserve Phase of the Cibola Branch eliminates that Branch from consideration.²⁰ The black-on-white pottery of the Kayenta Branch is decorated with carbon paint. As the pottery of the Upper San Jose District is decorated with iron paint, the final alternate choice is eliminated.

The boundaries of the Upper San Jose District during the Pueblo II occupation are not precisely known. The eastern boundary probably is in the vicinity of Bluewater, N. M., as Olson and Wasley's survey indicated the shift in

²⁰Cibola Branch, Reserve Phase is the scheme outlined by the Gladwins in 1934. The phases outlined for the Cibola Branch by Danson, E. B., "An Archaeological Survey...", 1957, are the same as those of the Chaco District during Pueblo II.

importance from Socorro B/W to what was then identified as Chaco pottery in that area. The northern boundary is probably near the southern edge of the top of Lobo Mesa. Three sites found on top of Lobo Mesa by the author showed a majority of Chaco (Escavada B/W and Gallup B/W) District sherds, although Upper San Jose District sherds were present. These sites are in the North one-half, Section 10, Township 14 North, Range 13 West, New Mexico State Highway Department Planning Division Map, Thoreau Quadrangle. Six sites found near the base of the mesa, in the North one-half, Section 22, Township 14 North, Range 13 West, had predominantly Upper San Jose District pottery. These two groups of sites are north of Thoreau and about two air miles apart. All of these sites appeared to be small unit pueblos.²¹

The western boundary is unknown. Dittert believes it may be in the vicinity of Fort Wingate, but Highway Cultural Inventory sherd collections show that Grants B/W and Prewitt B/W continue into the valley of the Rio Puerco of the West at least as far as the Arizona line.

The southern boundary may be fairly well established by negative evidence. According to Dittert, sites in the Las Tusas Valley, south of the Upper San Jose Valley, belong

²¹See Appendix A.

to this district. A cursory survey through the valley between Oso Ridge and Lookout Mountain Rim revealed no sites. A similar survey by Joel Shiner several years ago had the same result.²² A similar survey over part of the northern side of Lookout Mountain Rim had the same negative result. From this evidence, it would seem that the southern boundary of the district is somewhere near the southern edge of the Las Tuzas Valley, near the northern base of Lookout Mountain Rim.

III. Pueblo II Phases in the Upper San Jose District

The Pueblo II period in the Upper San Jose District may be divided into two phases, the Red Mesa Phase and the Prewitt Phase. These Phases are discussed below.

The Red Mesa Phase

The Red Mesa Phase of the Upper San Jose District is essentially the same as that described for the Chaco District.²² This is not surprising, since Gladwin's Red Mesa Phase sites are near the western boundary of the Upper San Jose District. Whether the Chaco District Red Mesa Phase differs from the Upper San Jose District Red Mesa Phase has not been determined. No work on Chaco District Red Mesa Phase sites has been reported. It is quite possible that the Upper San Jose Red Mesa Phase will differ from the

²²H. S. Gladwin, "The Chaco Branch...", passim.

Chaco District Red Mesa Phase in much the same manner that the Upper San Jose Frewitt Phase differs from the Chaco District Wingate Phase, but there is no evidence at the present to support this supposition.

A possibility exists that both pit houses and kivas were in use in the Upper San Jose District during this phase. In two cases, there were indications that this was the case. Since Gladwin almost missed finding the kivas (or pit houses) present at his Red Mesa Phase sites, there is a possibility that he may have missed other structures. This supposition cannot be proved with the evidence available, but the problem could be settled by careful excavation of selected sites.

LA 6469 (Figure 19).²³ LA 6469 is one of the three Red Mesa Phase sites excavated during the 1962 season. It consists of three surface rooms, a kiva, a shallow pit house and a deep pit house. One of the surface rooms has four walls, one has three and one has two. There is no evidence that any other stone masonry walls ever existed in the two rooms without four walls. A post hole is found in the plaza where a corner might be expected for the two walled room, indicating that it may have been partly a brush or wattle and daub structure. The masonry consists of crudely coursed sandstone blocks and slabs. A few shaped sandstone

²³S. D. Bussey and G. DeCicco, "The Cueva del Perro Site....," in press.

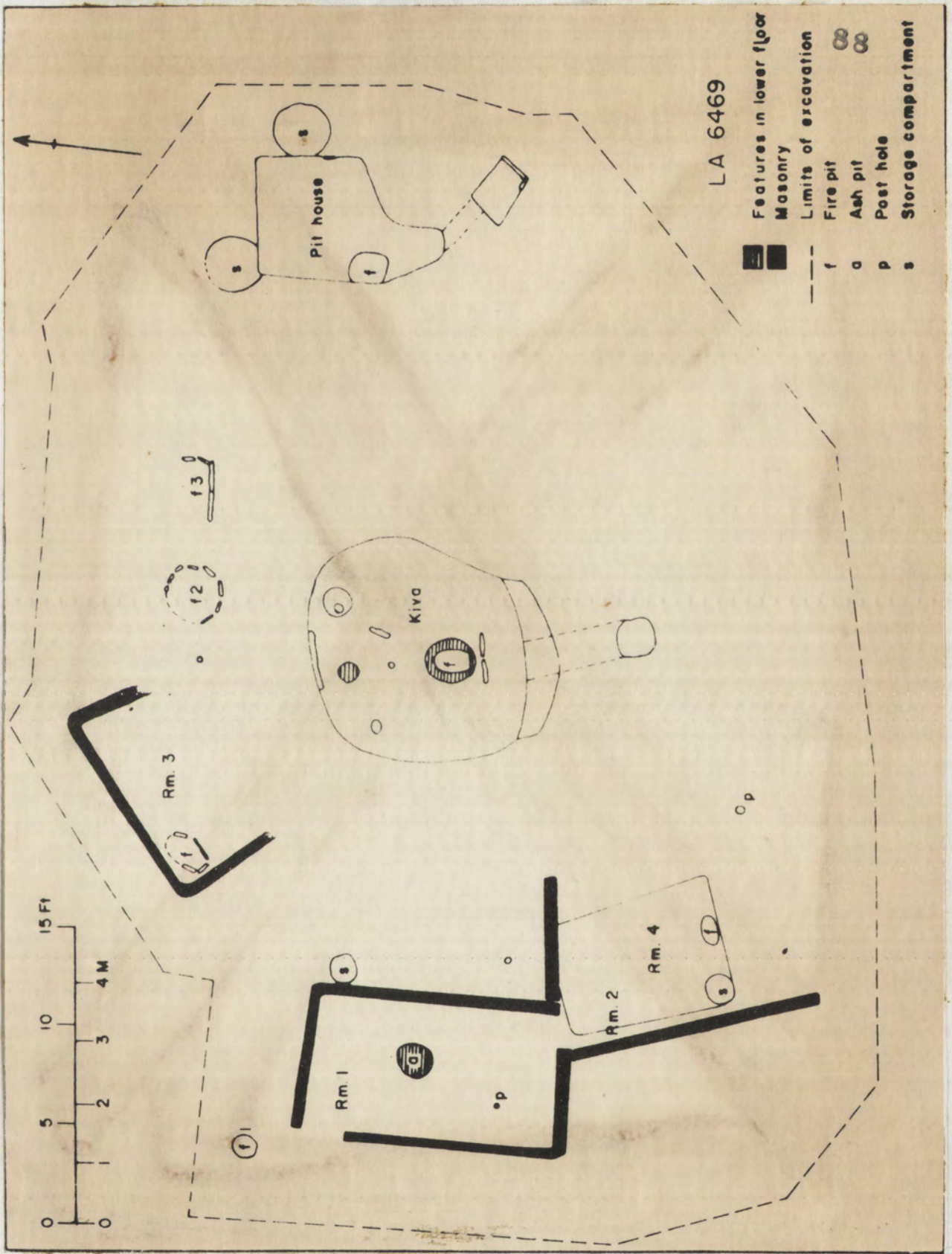


Figure 19. LA 6469.* A Red Mesa Phase site in the Upper San Jose District.

*S. D. Bussey and G. DeCicco, "LA 6469, the Cueva del Perro Site...", in press.

slabs cap the low stone masonry stubs. An ash pit in the lower floor of the four-walled room is the first such feature found in any Red Mesa Phase surface structure.

The floor of the shallow pit house is about 18 inches below ground level. Stone masonry walls originally were present above ground level. The wall of one of the surface structures had been built over this pit house after it was filled in. Floor features are a floor cist and a crude fireplace consisting of a few rocks placed around a burned spot on the floor.

The easternmost structure of the site is the deep pit house. It contains a fire basin and two wall cists. The ventilator opens into a small southern extension of the main room. Both are on the same level. This extension might be called a southern antechamber. Its purpose is unknown. When excavated, the pit house contained more trash than any other structure on the site. It evidently had been abandoned and had served as a dump. Since the eastern portion of the wall was obliterated during the search for the pit house, its relationship with the plaza surface could not be determined.

The kiva is roughly circular. It has a small bench in the south wall beneath which the ventilator tunnel runs. There are two floor levels. The lower one contains a fire basin and a post hole. The upper one contains a fire basin and sipapu aligned with the ventilator, two post holes, a small slab of limestone oriented roughly north, and a trench

cut into the floor against the north wall. The kiva was found to be filled with trash and washed dirt. Ashes and charcoal similar to campfire debris had been dumped on the bench. A well-defined, hard packed plaza surface extends over the kiva. Only a slight depression was visible even after the plaza had been cleared. The outside ventilator opening was not visible in the plaza surface.

There was no significant variation in pottery in any of the structures. All had been abandoned within a short enough time that the frequencies of types of pottery had not changed. There is evidence that the site was occupied after all the subsurface structures had been abandoned, but whether this occupation was seasonal or permanent is not known. The occupants of the site may have been from a larger site nearby to the east, in which case they would have used the kiva of that village.

Red Mesa B/W is the dominant decorated pottery. Tchatchi Banded, a variant of Kana-a Gray is the dominant utility pottery.

The Prewitt Phase

The Prewitt Phase is distinguished from the Red Mesa Phase on several bases. Surface structures are built of full stone masonry walls. Hearths of various types are found in some of the rooms, indicating that surface rooms were being used as residences. There are kivas at most of the sites. Early in the phase, Red Mesa B/W falls below thirty per cent

of the Upper San Jose District black-on-whites. Grants B/W and Prewitt B/W increase in proportion to Red Mesa B/W later in the phase.

Generally speaking, the masonry is poor, ranging from crudely banded to random uncoursed blocks and spalls. Pit houses continue in use, accompanied by masonry surface structures. Kivas, where identifiable, are east of the surface structures. At times, the distinction between pit house and kiva is hard to make. No particular pattern of construction is evident. Sites range from one room and a pit house to fifteen rooms and a kiva. Because the fifteen-room site, LA 6383, seems to have had three periods of occupation, the upper limit of pueblo size for this phase could be set at about ten rooms. This is by no means as definite a statement as has been made for phases in other districts, e. g., for Gladwin's Wingate Phase, but it must be remembered that the Prewitt Highway Salvage project did not select sites for excavation. All sites were located within the highway right-of-way that were excavated. If Gladwin had followed a similar course, his Wingate Phase definition might be considerably different.

Some of the Prewitt Phase sites continue the use of Red Mesa Phase site plan, i. e., surface rooms without firepits associated with pit houses, but full-height masonry walls are used and the pottery complex is that of the Prewitt Phase.

It would seem that when the population lives in small villages, there is less pressure to conform to any particular architectural standard, although the lack of conformity might be based on the lack of enough intervillage contact to establish a pattern to conform to. The form that a dwelling or village will take seems to depend on the individual builder.

The village forms of the Prewitt Phase may be summarized as follows:

1. Small one or two room units with or without pit houses or kivas.
2. Larger five to ten room units with or without pit houses or kivas.

Examples of the major types of sites in the Prewitt Phase are given below.

LA 2672 (Figure 20).²⁴ LA 2672 represents one of the larger sites of the Prewitt Phase. It consists of a small seven room pueblo with a kiva on the north side. The kiva is shallow. It had been excavated to, and in places slightly through, bedrock. A single course of massive blocks partially outlined the walls of the kiva on the surface, indicating that it had originally had masonry walls above the surface. The kiva fill consists mainly of massive masonry blocks from

²⁴S. D. Bussey and G. DeCicco, "Arroyo de los Chivos Site," in J. E. Smith, Highway Salvage Archaeology, in press.

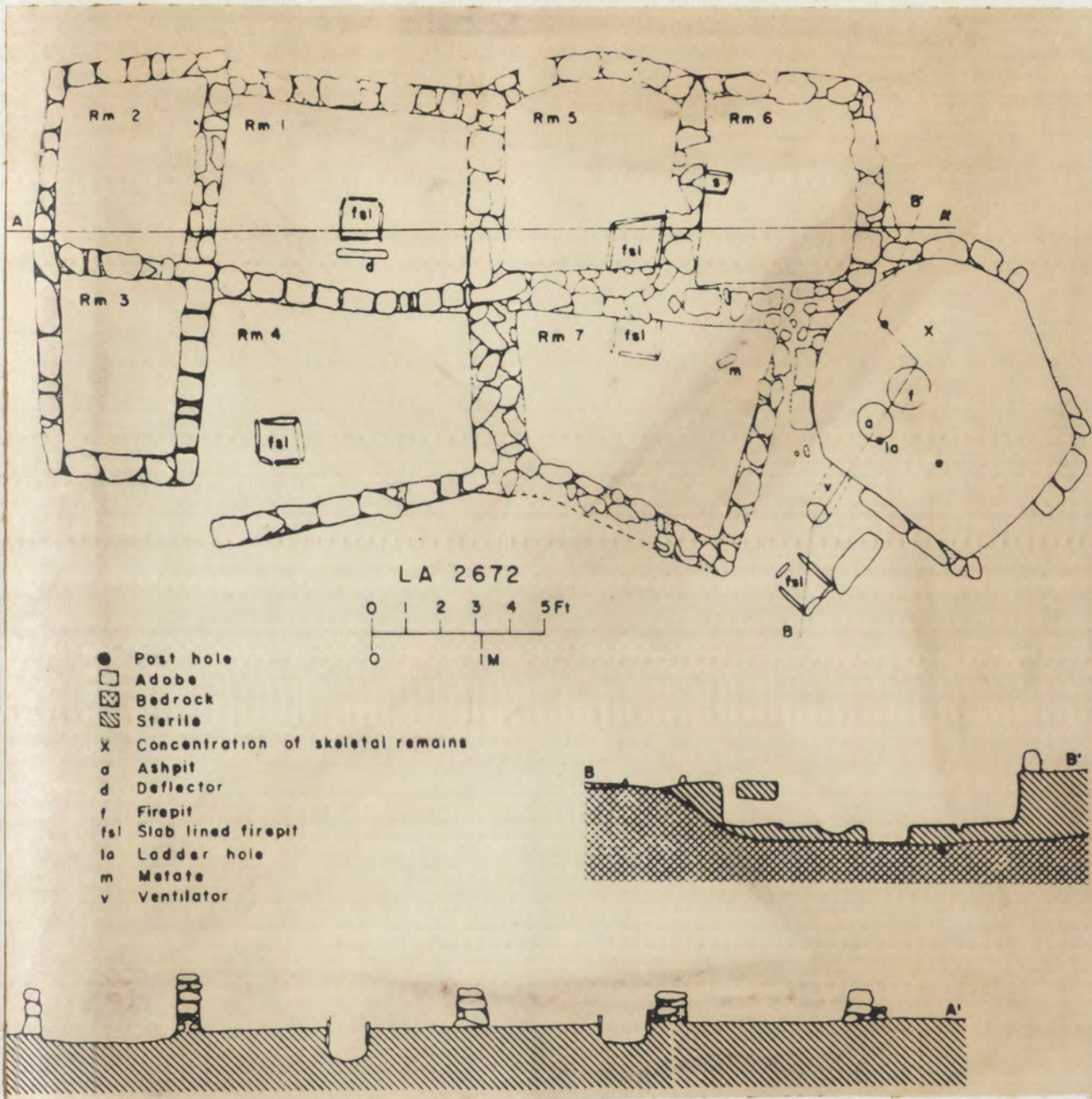


Figure 20. LA 2672.* A Prewitt Phase site of the Upper San Jose District. Note the pairing of living and storage rooms.

*G. DeCicco and S. Bussey, "LA 2672, The Arroyo de los Chivos Site...", in press.

the walls. A ventilator opens to the southeast, in line with an ash pit and a firepit. No certain evidences of a deflector were found. A human skeleton was spread haphazardly on the floor. The skull had been placed upright against the southeast wall and the mandible was in the ash pit, under ash.

The pueblo was built of the same massive block masonry used in the kiva walls. In places, the wall stubs were two feet high. Four rooms contained slab-lined firepits, while the other three were featureless. The rooms were arranged in a double bank running roughly north-south. There were four rooms on the west side and three on the east. The northernmost room of the west bank used part of the southwest wall of the kiva as its northeast corner.

Pottery collections suggest that the kiva may have been the first structure abandoned, but not enough sherds were available for a good statistical analysis.²⁵

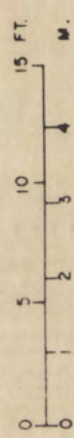
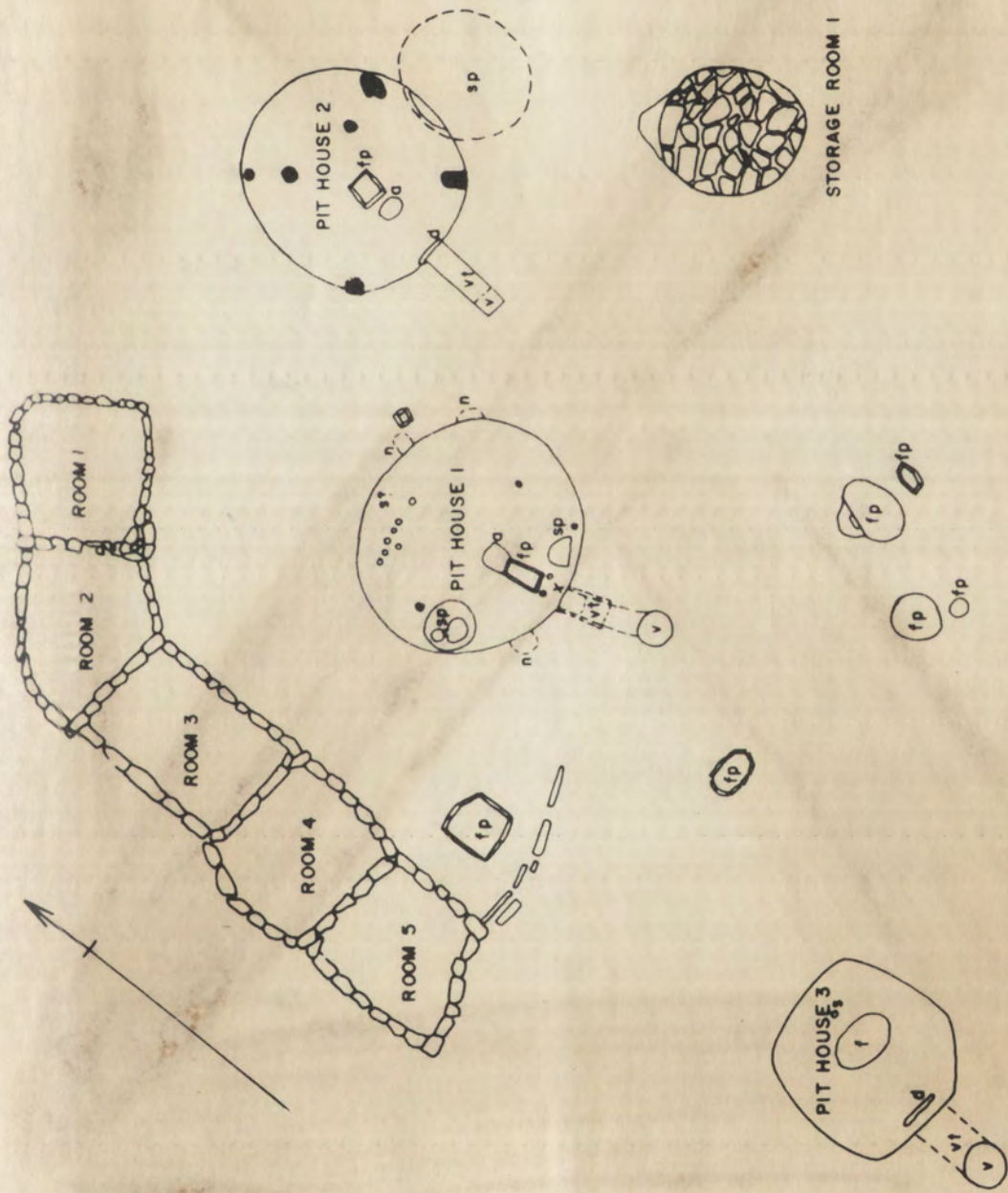
LA 6390 (Figure 21).²⁶ LA 6390 consists of three pit houses running in an irregular north-south line, five masonry surface rooms running in a north-south arc west of the pit houses, and two subsurface storage rooms, one shallow

²⁵J. Shiner, in J. E. Smith, Highway Salvage Archaeology, in press.

²⁶S. D. Bussey, "The Blue Spruce Site," in J. E. Smith, Highway Salvage Archaeology, in press.

LA 6390

- Post hole
- a Ash pit
- d Deflector slab
- f Fire basin
- fp Fire pit
- n Niche
- s Sipapu ?
- sp Storage pit
- v Ventilator
- vt Ventilator funnel
- x Possible ladder holes



(fp)

Figure 21. LA 6390.* A Frewitt Phase pit house village.

*S. D. Bussey, "LA 6390, The Blue Spruce Site...", in press.

and one deep.

The masonry of the surface rooms varies from thin, uniform coursed slabs to coarser, variable-sized slabs. Wall bases are of thin coursed slabs or large, roughly rectangular blocks. None of the rooms seem to have been lived in. No floors were found other than the beginning of sterile native earth and no floor furnishings were found.

The southernmost pit house is the simplest architecturally. The ventilator, opening south, is aligned with a slab deflector, an oval fire basins, and a sipapu. The next pit house in line is more complex. The ventilator has a masonry section above the opening into the room. The ventilator tunnel is slab-walled near the opening. A slab deflector, an ash pit, a firepit, and a sipapu are aligned with the ventilator. There are also two floor cists, one on either side of the firepit against the walls and a number of post holes. The northernmost pit house has a shaped framing slab at the ventilator opening, an irregularly shaped ash pit, a fire pit, and a sipapu, and several post holes. A large storage cist was cut into the wall and down to about five feet below the floor level.

The deep subsurface storage room was eight feet deep and had a slab floor, but no other furnishings. The shallow subsurface storage room was merely a featureless pit.

Pottery analysis indicates that the middle pit house and the shallow storage room were abandoned first. Abandonment

of the deep subsurface storage room before the rest of the site is proven by a burial in the upper fill. Shiner believes that the site was used seasonally after the abandonment of all the pit houses.²⁷ He bases this belief on several firepits found on a plaza surface east of the pit houses and a windscreen extending east from the southeast corner of the surface unit. Outside fireplaces are frequently found at sites where the surface structures show no evidence of having been lived in. There did seem to be a hard, packed surface over all of the pit houses, but this may have been caused by standing water. The site is built on a static sand dune. The abandoned pit houses caused a depression about thirty-three feet in diameter which holds rainwater after every rain. The upper fill in all three pit houses was adobe hardened to a cement-like consistency by caliche deposits.

LA 6385.²⁷ LA 6385 is a small site consisting of two separate rooms and an outside firepit. Room walls, standing no more than a foot high, are of rough slab and block masonry. In places, three courses remain. The wall bases consist of large irregular or roughly shaped boulders. The upper portions of the walls are of coursed small rectangular

²⁷S. D. Bussey and G. DeCicco, "Dos Casitas," in J. E. Smith, Highway Salvage Archaeology, in press.

slabs. There was not enough stone left on the site to have carried the walls much higher than they were. There is a possibility that the site was robbed of building stone. Several hogan rings, a large Navajo (?) firescreen and a Prewitt Phase (?) site were found south of LA 6385. The slab-lined firepit lies just outside the north wall of the western room.

The sherd collection was small, but indicated that the site was late enough to have a larger percentage of Prewitt B/W, the latest type to be developed in the Upper San Jose District.

IV. Other Cultural Stages in the Upper San Jose District

No sites earlier or later than Pueblo II were found during the 1962 Prewitt Salvage Project. Olson and Wasley found no sites in the Upper San Jose District earlier in stage than Pueblo II, although a few Kiatuthlanna B/W sherds were collected on two sites.²⁸ A few sherds that appeared to be Kiatuthlanna B/W were found during the excavations of LA 6381 and LA 6469, but these may have been early Red Mesa B/W. Gladwin found some Kiatuthlanna B/W in his excavations of Red Mesa Phase sites near what is presumed to be the western boundary of the Upper San Jose District.²⁹

²⁸A. P. Olson and W. W. Wasley, "An Archaeological Traverse Survey...", p. 272.

²⁹H. S. Gladwin, "The Chaco Branch...", p. 56.

One large site, LA 2690, was found by Olson and Wasley on the Fort Wingate Ordinance Depot. They assigned the site to Pueblo III, Hosta Butte Phase (?).³⁰ Again, this site is located on what is considered to be the western boundary of the District. Two Pueblo II-III sites of the Acoma Branch to the east were excavated, but between the Acoma Branch sites and the site on the Fort Wingate Ordinance Depot, no Pueblo III sites were found.

While no evidence exists for an occupation later than Pueblo II, other than contemporary Navajo, and little exists for an earlier occupation, it should be remembered that the two intensive surveys of the area only covered a strip about a half a mile wide, for the most part south of Highway 66. Data from Gladwin's survey are not available. An intensive survey of the whole District might produce sites both later and earlier than Pueblo II.

Desertion of the Upper San Jose District

Gladwin has stated that he believes that migration out of the Upper San Jose District began about 850 and that the entire area between Gallup, N. M., and Mount Taylor, near Grants, N. M., was deserted by 1000.³¹ He attributes

³⁰A. P. Olson and W. W. Wasley, "An Archaeological Traverse Survey...", pp. 280-281.

³¹H. S. Gladwin, A History of the Ancient Southwest, (Portland, Maine: Bond Wheelwright Co: 1957), p. 215.

this migration, and later urbanisation and desertion of the Four Corners area to attacks by Athabaskans moving into the District.³² There is no evidence to support this theory. Occupation continued in the Acoma Branch, east of Bluewater, N. M.,³³ and on the Fort Wingate Ordinance Depot, west of Fort Wingate, N. M.³⁴

A more plausible theory is that a series of droughts or a change in pattern from predominant winter to predominant summer rainfall gradually forced the inhabitants to move away from the District. A drought would have two effects: crops would be damaged and arroyo cutting would occur. If the stalks are planted far enough apart, corn can be grown successfully even if there is no rain during the growing season, but planting must take place in moist earth.³⁵ Beans need continuing moisture throughout the growing season.³⁶ A decrease in winter precipitation would have affected the growth of corn and a decrease in overall precipitation would have affected the growth of beans. Either circumstance

³²H. S. Gladwin, ...Ancient Southwest, p. 216.

³³A. P. Olson and W. W. Wasley, "An Archaeological Traverse Survey....," pp. 292-323.

³⁴Ibid., pp. 280-281.

³⁵L.H. Baily (ed.), Cyclopedia of American Agriculture, Vol. II, "Crops," (New York: MacMillan Company: 1909), pp. 144 and 409.

³⁶Ibid., p. 208.

might make horticultural life impossible in the area.

Dates for apparent drought in the Pueblo Plateau area, as indicated by tree-ring widths, are 980-981, 984, 991, 993, 997-999, 1001-1003, 1005, 1009, 1014, 1019, 1023, 1028, 1036-1041, and 1044.³⁷ As drought is indicated for other areas of the Colorado River Basin, and as the Chaco area is shown by tree-ring records to be represented in this pattern during approximately the same years, it is possible that the Upper San Jose District suffered drought during the same years.

It is quite possible that the District may have been abandoned during the longest drought, from 1036 to 1041. It is also quite possible that this dry period introduced an erosion cycle which so lowered the water table a few years later that agricultural produce became inadequate for the needs of the population and exodus resulted. A third possibility being suggested today to account for the apparent droughts seen in the tree-rings is that the climate was not dryer, but appreciably cooler, a change which would make the growing season for corn equally impossible in this high marginal area.

³⁷E. Schulman, "Dendroclimatic Changes in Semiarid Regions," Tree-Ring Bulletin, Vol. 20, No. 3/4, (The Tree-Ring Society with the cooperation of the Laboratory of Tree-Ring Research, University of Arizona: 1954), pp. 26-27 and chart, "Master Growth Indices for Archaeological Areas of the Colorado River Basin."

Gladwin believes that the occupants of the District moved west and north into the Chaco District, thus providing the growth in population of that district which resulted in the construction of the small houses of the Hosta Butte Phase.³⁸ In view of the close cultural relationship existing between the Chaco District and the Upper San Jose District, as indicated by the similarities in pottery, this would seem to be the most logical assumption. However, until Pueblo III sites surrounding the Upper San Jose District are studied with this problem in mind, no solution can be considered valid.

V. Problem Two: Conclusions

No definite indications of occupations prior to the Pueblo II Period have been found in the central portion of the Upper San Jose District, but Gladwin found Kistuthlanna B/W, a Pueblo I type, in his excavations in the Red Mesa Valley, an area which may belong to the Chaco District of the Chaco Branch. A single site of the Pueblo III period was found by Olson and Wasley on the Fort Wingate Ordinance Depot. This site is near what may be defined as the western boundary of the Upper San Jose District of the Chaco Branch.

It has been shown that the Upper San Jose District

³⁸H. S. Gladwin, ...Ancient Southwest, p. 125

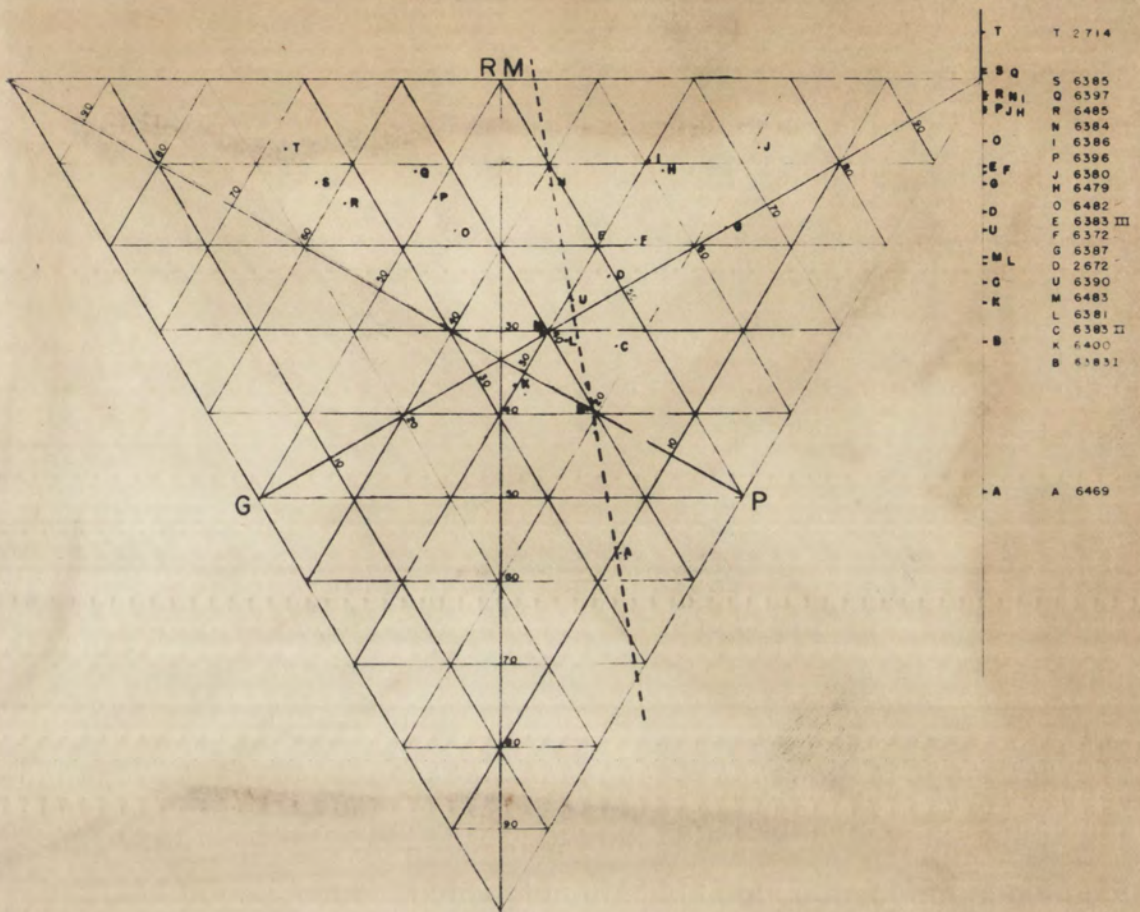


Figure 22. The approximate percentages of Red Mesa B/W (RM), Grants B/W (G), and Prewitt B/W (P) for each site excavated in the Upper San Jose District are shown. The three types together equal one hundred per cent of the pottery considered.

Joel Shiner, from material to be published in J. E. Smith, "Highway Salvage Archaeology...."

constitutes a distinct cultural unit of the Chaco Branch, at least during the late stage of the Pueblo II period. Similarities in pottery indicate that the closest cultural relative of the Upper San Jose District is the Chaco District. These similarities place the Upper San Jose District in the Chaco Branch rather than in the surrounding Acoma, Cibola, or Kayenta Branches.

The general boundaries of the Upper San Jose District have been tentatively established on the evidence of excavations and site surveys. The northern boundary is probably near the southern rim of Lobo Mesa. The eastern boundary is near the town of Bluewater, N. M. The southern boundary is probably on or near the northern slope of Lookout Mountain Rim. The western boundary is less distinct. The westernmost excavated site in the District is on the Fort Wingate Ordinance Depot, but sherds of Upper San Jose District pottery types are found as far west as the Arizona State Line.

Pueblo II cultural stages in the Upper San Jose District conform generally to those throughout the Anasazi Southwest. The early stage, represented by the Red Mesa Phase, is characterized by surface storage structures and pit houses. In the Upper San Jose District, there are indications that kivas may occur with pit houses. Pueblo I neck-banded utility pottery is present early in the phase, but it is gradually superceded by Pueblo II corrugated types.

The late stage of the Pueblo II period, represented by the Prewitt Phase, is characterized by surface pueblos, containing both dwelling and storage rooms, accompanied by kivas. The walls of the surface structures are built completely of stone masonry. Corrugated pottery replaces neck-banded pottery. Grants B/W and Prewitt B/W become the predominant decorated types.

A possible explanation for the desertion of the District is a series of short droughts or other weather changes which culminated in the longer drought of 1036-1041.

APPENDIX A

A General Summary of Patterns in Certain
Pueblo II Sites

Mesa Verde Branch, Mesa Verde District

<u>Site</u>	<u>Surface Structures</u> Type	<u>Rooms</u>	<u>Features</u>	<u>Subsurface Structures</u>	<u>Major Pottery Types</u>
16, Post and Adobe	Jacal	?	?	Pit House	?
102, Pueblo	Stone	2	none	Pit House	Chapin Gray Mocassin Gray Mancos B/W
16, Unit 1	Stone	3	Firepit, ash pit	Kiva	Mancos B/W Corrugated
Site 1, Pueblo	Stone	2	Firepit(?)	Kiva	Mancos B/W Corrugated
Site 16, Unit 2	Stone	?	?	Kiva	Mancos B/W Corrugated

Mesa Verde Branch, Ackmen-Lowry Area

Site 1	Slab, Jacal	1 1(?)	none	2 Pit Houses	Mancos B/W Lino Gray
Site 4	Jacal	2	none	House-kiva	Mancos B/W Indented Corrugated
Site 2	Stone	2	none	House-kiva	Mancos B/W Indented Corrugated

Keyenta Branch, Flagstaff Area

<u>Site</u>	<u>Surface Structures</u>		<u>Subsurface Structures</u>	<u>Major Pottery Types</u>	
	Type	Rooms			Features
NA 1600	Stone	4	Firepits	none	Kana-a B/W Black Mesa B/W
NA 1601	Stone	1	none	none	Kana-a B/W Black Mesa B/W
NA 1754	Stone	3	Firepit	Kiva	Black Mesa B/W Sosi B/W Dogosshi B/W Tusayan B/R

Keyenta Branch, Tsegi Area

RB 1006	Stone	1	none	Pit House	Black Mesa B/W Kana-a Gray Lino Gray
RB 551	Stone	4	Firepits, mealing bins	Kiva	"Pueblo II Black-on- whites," Dogosshi B/W Tusayan B/R Medicine B/R Tusayan Corrugated

APPENDIX B

The following material is quoted verbatim from a letter from Joel Shiner of the Laboratory of Anthropology. The material presented is, principally, the work of Lyndon L. Hargrave and Joel Shiner and will be published in the forthcoming Highway Salvage Archaeology in the Prewitt District edited by Jack E. Smith. The information is given in order to make more clear certain pottery descriptions referred to in the body of the thesis.

"The following paragraphs are meant to introduce type sherds of some new pottery types: a full discussion of the problem, together with descriptions will be published this year in a volume on "Highway Salvage in the Prewitt District." The comments herein are of the briefest sort, but will serve to outline some of the most obvious points used in separating the material. The validity of the new types has been proven repeatedly in stratigraphical analyses over a fairly broad area.

"As a result of studying the ceramics of 30 sites on Highway 66, the Laboratory of Anthropology has developed a new description for the Cibola White Ware series. The study

was made on sites appearing to date between A. D. 950 and A. D. 1050. The specific pottery is the group which formerly included Red Mesa, Escavada, and Gallup Black-on-whites. From these generalized and often confused "types," we have defined three types which demonstrate the trends that were taking place within the district that we studied.

"The trends concern many facets of vessel production: size, shape, decoration, temper, surface finish, and firing. The period is one of experiment and innovation. Temper changes from sand to sherd, vessel shapes change from a majority of bowls to a majority of jars. Vessels change in size from small to large. Decorations move from small ornate elements to bold solids and hatching. Surface finishes first deteriorate then later improve. Firing temperature rises so that pottery gets much harder.

"Early Red Mesa Black-on-white is smoothed on the unpainted surface, completely smoothed and polished on the painted surface. Temper is sherd, designs are small, well executed and uncrowded. Ticked lines, ticked solids, framing lines and scrolls predominate.

"Late Red Mesa Black-on-white has larger vessels. The surfaces are less well smoothed and not polished as well. Design elements become larger, simpler, and more crowded.

"Grants Black-on-white is unpolished to lightly polished in streaks on the painted surface. The unpainted surface is

left unimproved from the scraping. Design elements are solids, broad lines and coarse hatching.

"Prewitt Black-on-white is partially smoothed and semi-polished on the painted surface. Bowl exteriors are smoothed and semi-polished. Jar interiors are finger smoothed so that scraping marks are obliterated. Designs are simpler and are mostly broad lines and hatching. Line work is generally superior to that of Grants Black-on-white.

"Bluewater Black-on-Gray is almost identical to Red Mesa Black-on-white, but is unslipped.

"Las Tusas Black-on-gray is similar to Grants Black-on-white, but is unslipped. Its surface is rougher with protruding temper, the paste is darker and the paint frequently resembles a glaze.

"San Jose Black-on-gray is unslipped. It is similar to Prewitt Black-on-white in design and finish but is often smoother, better polished and with a light colored paste. Some late specimens have a floated surface that is difficult to distinguish from a slipped surface.

"Comparisons:

"Kiatuthlanna Black-on-white precedes Red Mesa Black-on-white, but is better polished and utilizes sand temper. The lines are finer and the layout quite simplified.

"Escavada Black-on-white is similar to Grants Black-on-white, but has a thinner white slip and blacker paint.

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