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Flaked Stone from the Navajo Springs Great House, Arizona

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IN the past 10 to 15 years, flaked stone analysis has become increasingly emphasized in Southwestern archaeology with a proliferation of flintknappers, replicators, and analysts working at ceramic period sites and supplementing site reports with lithic studies. Detailed lithic studies are now included in archaeological reports on ceramic period sites as a matter of course; nonetheless, the Southwest bias towards ceramics is still prevalent, and flaked stone analyses are often considered supplemental to ceramic analyses. The next step in significant lithic analysis, I believe, is the elevation of data derived from lithic studies to a level comparable to that accorded to ceramics, and then a comparison of the data from these different artifact classes to determine where they agree or point to differences that need further research.

Most Anasazi site reports provide morphological, or even technological, descriptions of the flaked stone assemblage. Noting that the inhabitants of the site were primarily agriculturalists, the authors proceed to justify the lithic analysis by pointing out that, of course, these farmers supplemented their diet with game, and therefore, needed flaked stone tools. The degree of reliance on agriculture during the Pueblo period is not argued in this paper, but it is argued that Southwesternists have been content for too long with descriptive flaked stone analyses. Our reliance on other kinds of data, such as ceramics, has blinded us to the information potential of stone tool technologies.

Undeniably, the advent of ceramic manufacture in the Southwest enables archaeologists to address a variety of issues including prehistoric economy, politics, and social organization that are difficult to study through other classes of artifacts. There is, however, an inherent problem in the tacit assumption of many Southwest archaeologists that all aspects of a given cultural group are writ large in the ceramic assemblage. Before that assumption can be supported, the role of ceramics in prehistoric society must be better understood. For example, in the social realm, to what degree are the activities of both genders expressed? Perhaps ceramics more accurately reflect female roles, while the flaked stone assemblage reflects long under-represented male activities. In the economic or political realm, what members of society were responsible for the trade of clay and ceramic items? Did women trade among themselves? Alternatively, did men control the distribution of ceramics that women produced? If some of these questions could be answered, how would it change our interpretations of Southwest prehistory?

Concomitant with our need to understand the social context of ceramic production and exchange is a critical need to understand the social context of lithic production and exchange. How often and for what purposes was flaked stone used by both men and women in daily activities? Who collected and distributed the raw material? Did women make and curate their own stone tools, and is a woman's tool kit identifiably different than a man's? Who controlled lithic exchange? Did men exchange lithic artifacts and women exchange ceramics?

Is the distribution of a given group's ceramics isomorphic with the distribution of that same group's flaked stone? Would the Southwest prehistoric cultural and ethnic boundaries, so neatly defined by ceramic distributions, coincide with boundaries delineated by lithic tools?

Clearly these questions are beyond the scope of the present paper, but Southwest archaeologists trying to understand ceramic period sites must use all available means to understand prehistoric society. The following is a case study of one prehistoric ceramic period community, and while there is no pretense of answering the questions raised above, it is my hope that lithic technological studies will become as important at sites with ceramics as they are at aceramic sites, and further, that lithic technological analyses will be treated as equally valuable and informative.

BACKGROUND

The Chaco Canyon Anasazi were prehistoric farmers of the San Juan Basin, northwest New Mexico, between approximately A.D. 900 and 1250. Their most substantial occupation was in Chaco Canyon during the late Pueblo II - early Pueblo III period (A.D. 1000 and 1150). By A.D. 1250, however, Chaco Canyon was virtually abandoned (Cordell 1984; Judge 1984, 1989; Vivian 1990). The remains of the mysterious Chaco Canyon dwellers are remarkable for their striking masonry styles; large, well-planned, multi-storied structures; massive public architecture; and ritual structures known as "Great Kivas" (Cordell 1984; Lekson 1984).

Until about 15 years ago, most Southwesternists viewed the Chaco florescence as a unique and unprecedented cultural development by a local Anasazi population. Recently, a number of sites across the entire Colorado Plateau (Fig. 1, Table 1) that are external to Chaco Canyon, but Chacoan in nature, have been recorded (Marshall et al. 1979; Powers et al. 1983; Fowler et al. 1987; Gilpin 1989). The attributes that link these sites – Great Houses – to the Chaco Anasazi include "Chaco-style" masonry, Chacoan architectural form, Chacoan pottery, a Great Kiva, and a prehistoric road. Surrounding virtually every known Great House are satellite sites. These sites cluster around the Great Houses, comprising communities (see Marshall et al. 1979) whose role and relationship to the Great Houses are yet to be determined.

To account for this Great House phenomenon and explain its interrelationship to sites within Chaco Canyon, traditional hypotheses of Chaco Canyon development and decline have been reformulated (Marshall et al. 1979; Powers et al. 1983; Fowler et al. 1987; Lekson et al. 1988; Warburton and Graves n.d.). The Chaco System is variously proposed to be comprised of Great Houses that were the residences of elite managers (Tainter and Gillio 1980; Powers 1984), public buildings constructed for community civic and ceremonial purposes governed by elite managers (Marshall et al. 1979), a combination ceremonial center and marketplace – the "pilgrimage fair" idea (Judge 1984; Toll 1985), or public ritual structures that served the local community (Stein 1987). Some researchers (Marshall et al. 1979) hypothesized *in situ* development, while others (Powers et al. 1983; Warburton and Graves n.d.) hypothesized that emigrants from Chaco Canyon colonized existing local groups.

To increase our understanding of the Chaco System, a Great House on its known periphery, was elected for study. External not only to Chaco Canyon, but also to the San Juan Basin (Fig. 1, Table 1), Navajo Springs (AZ-P-53-43) in Navajo, Arizona, is one of the westernmost identified Pueblo II Period Great Houses. Located on the southwest frontier of the Chaco System, approximately 300 km. southwest of Chaco Canyon, it serves as a case study of artifactual and architectural similarities between Great Houses adjacent to Chaco Canyon and those some distance away.

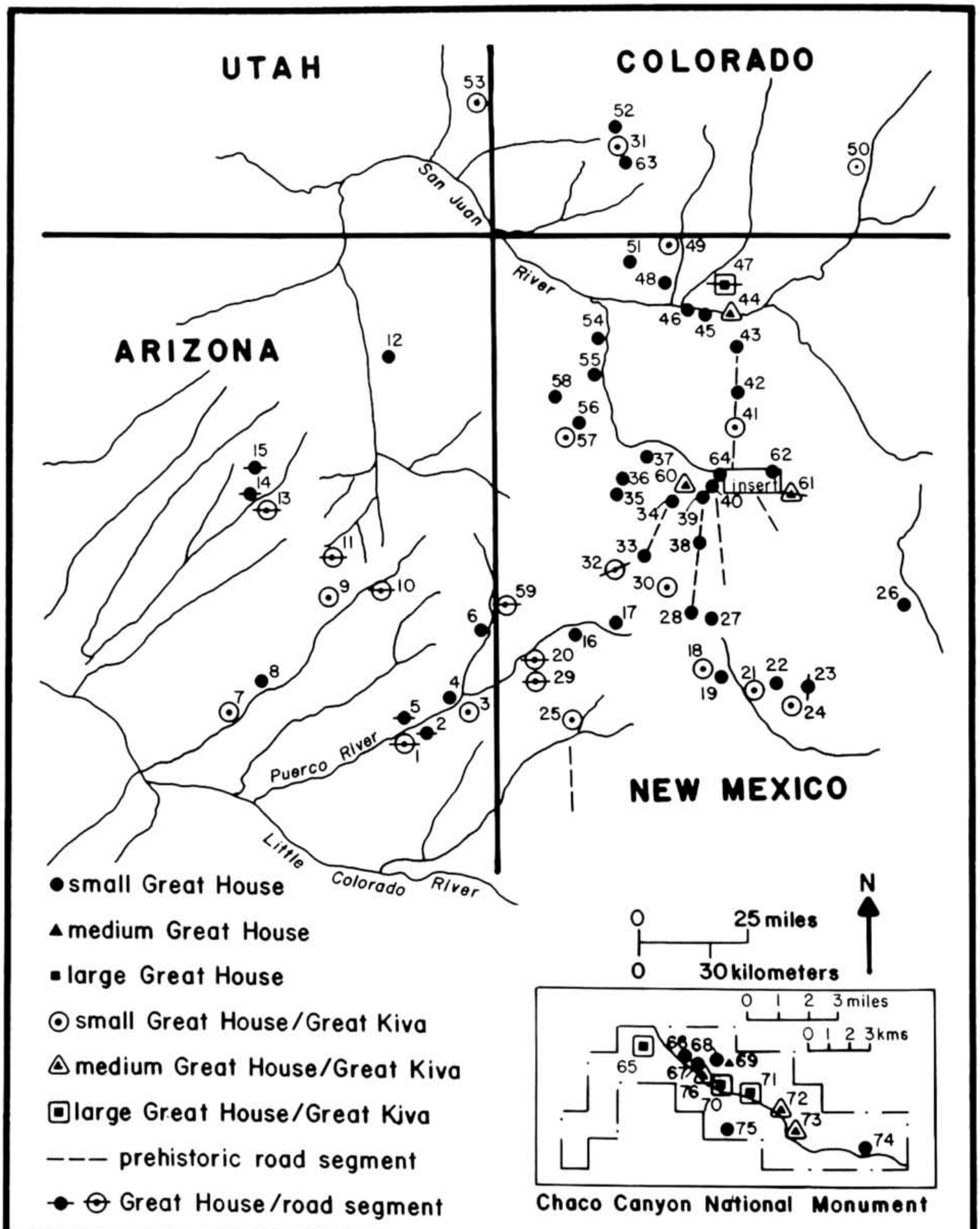

Fig. 1. Location of the Navajo Springs Great House and other known Great Houses (see Table 1 for key to site names).

Table 1
OUTLIERS IDENTIFIED IN FIGURE 1[a, b]

Map Number	Outlier Name	Map Number	Outlier Name
1.	Navajo Springs	39.	U. Kin Klizhin
2.	Sanders	40.	Green Lee
3.	Allantown	41.	Pierres
4.	Houck	42.	Halfway House
5.	Chambers	43.	Twin Angels
6.	Hunters Point	44.	Salmon
7.	Plaza Site	45.	Jacques
8.	Malpais Spring N&S	46.	Sterling
9.	Sunrise Spring	47.	Aztec
10.	Ganado	48.	Site 39
11.	Bear Squats	49.	Site 41
12.	Round Rock	50.	Chimney Rock
13.	Tse Chizzi	51.	Squaw Springs
14.	Whippoorwill	52.	Escalante
15.	Burnt Corn	53.	Lowry
16.	Fort Wingate	54.	Hogback
17.	Coolidge	55.	Sanostee
18.	Casamero	56.	Newcomb
19.	Andrews	57.	Skunk Springs
20.	Kin Hocho'i	58.	Tocito
21.	Haystack	59.	Thunder Ridge
22.	Kin Nizhoni	60.	Kin Bineola
23.	San Mateo	61.	Pueblo Pintado
24.	El Rito	62.	Bis sa'ani
25.	Village of the Great Kiva	63.	Wallace
26.	Guadalupe	64.	Kin Klizhin
27.	Kin Ya'a	65.	Penasco Blanco
28.	Muddy Water	66.	Casa Chiquita
29.	Atsee Nitsaa	67.	Kin Kletso
30.	Dalton Pass	68.	New Alto
31.	Ida Jean	69.	Pueblo Alto
32.	Peach Springs	70.	Pueblo Bonito
33.	Standing Rock	71.	Chetro Ketl
34.	Indian Creek	72.	Hungo Pavi
35.	Grey Hill Spring	73.	Una Vida
36.	Whirlwind House	74.	Wijiji
37.	Great Bend	75.	Tsin Kletsin
38.	Bee Burrow	76.	Pueblo del Arroyo

[a] After Graves (1990:Table 14).
[b] References: 1-15, Gilpin (1989); 16-28, 30-76, Powers et al. (1983); 29, Fowler et al. (1987).

OBJECTIVES

The lithic analysis described herein is intended to interface with the ceramic analysis in response to a series of research questions derived for the Navajo Springs Great House. The present analysis is restricted to responding to the following questions.

What role does the Navajo Springs Great House play on the local level? Is there any artifactual evidence in support of the Great House serving as an elite residence, community civic or religious center, marketplace, or other public building? Is there status difference reflected in the artifactual remains? What is the role of the community sites in relation to the Great House? Are these sites integrated with the Great House in some kind of support role?

THE SITE AND FIELD RESEARCH

The Navajo Nation Archaeology Department—Northern Arizona University Branch Office (NNAD-NAU), conducted preliminary archeological field research at the Chaco Era (A.D. 1050 - 1150) Great House of Navajo Springs, in 1989 (Fig. 1, Table 1). This site sits on a low hill with a commanding panoramic view; the winding Puerco River cuts through the desert only 0.5 km. to the west. Approaching the site from almost any direction, the rubble mound looms on the horizon.

Two spatially distinct architectural units (loci) comprise Navajo Springs site: the Great House and the North Complex. The Great House (Fig. 2) may have as many as 40 rooms. All exposed walls were constructed of rubble cores with dressed face Chaco-style masonry (core-and-veneer masonry). This Great House, like others of its ilk, is characterized by thick walls and 3 to 4 m. of relief in the rubble mound.

The North Complex, 150 m. northeast of the Great House but connected to it by a prehistoric road, consists of a rubble mound/room block and associated midden mound on the north side of the road and two rubble mound/room block and associated midden mounds on the south side. The North Complex lacks the mound relief of the Great House and appears to lack core-and-veneer masonry.

Fieldwork

Fieldwork included three tasks: survey, artifact analysis, and architectural documentation. Intensive archaeological survey was conducted on 160 acres (65 ha.) surrounding Navajo Springs, and resulted in the documentation of 22 sites including the Great House and North Complex. The sites appear to surround the prominently located Great House; their position, combined with their variety in size and apparent function, lends support to the notion of interdependent sites organized in a community centered around the Great House. The site types, in addition to the Great House, include habitations ranging in size from 4 to 50 masonry rooms, small structural sites with one or two isolated rooms that probably served as field houses associated with farming, and small sherd and lithic scatters from limited activities.

In-field analysis was determined to yield the greatest amount of information under highly restricted time and money constraints. This kind of analysis mitigates the necessity of costly laboratory procedures and long term curation, and it leaves the artifactual remains in place for future researchers. In-field analysis was conducted at each of the Navajo Springs community sites. For many of these sites, a small, judgementally selected sample of artifacts was analyzed. While this provided an impressionistic sense of the ceramic and lithic artifacts, a more systematic analysis was undertaken at the Great House, the North Complex, and two adjacent community sites—Marble Ridge (AZ-P-53-22) and Ladle Ridge (AZ-P-53-30). Both of these latter sites are large, apparent habitation sites with masonry rooms and dense artifact scatters. The following preliminary artifact

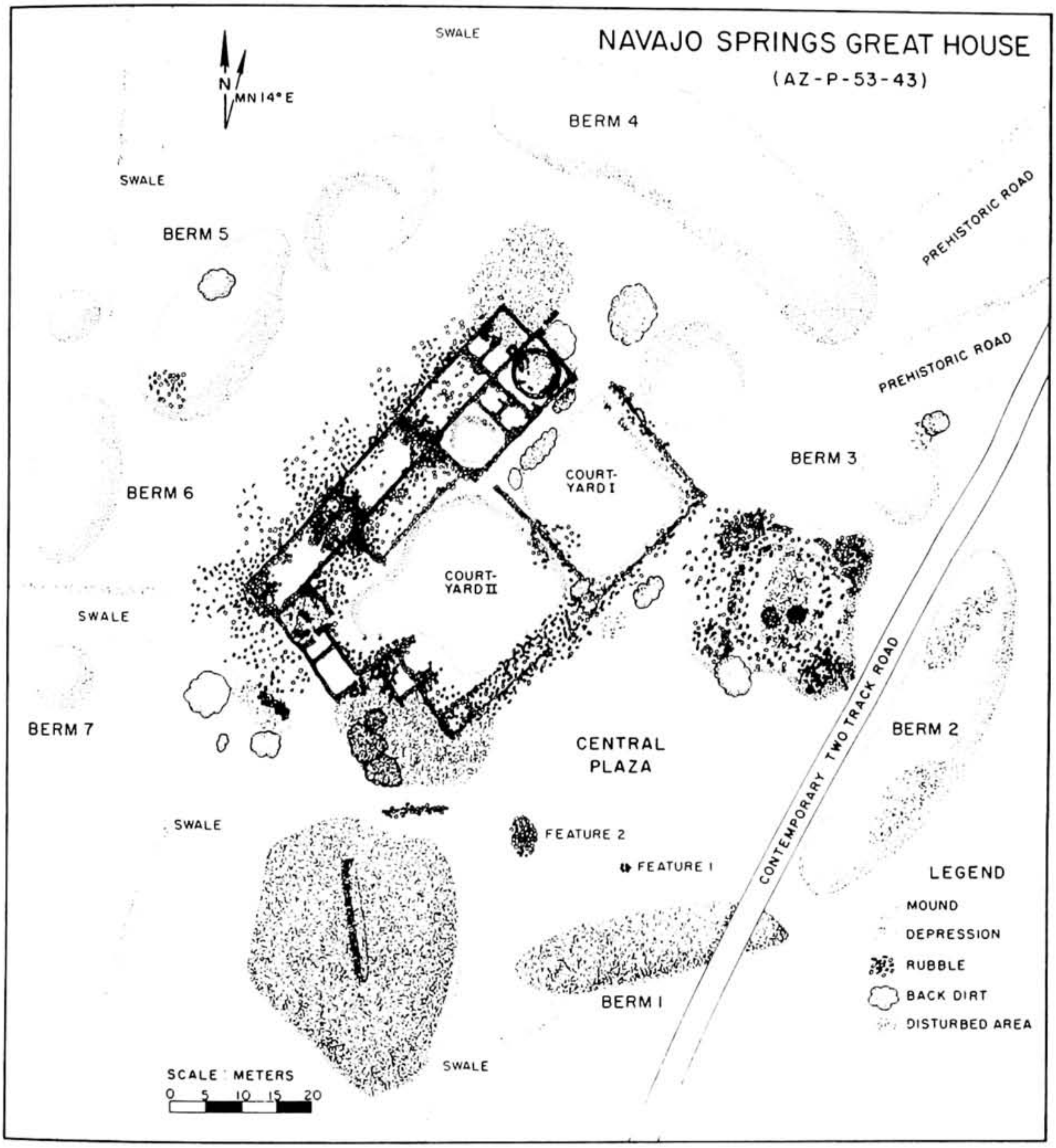

Fig. 2. Map of the Navajo Springs Great House (drawn by Denny Carley, based on original map by Andrew Fowler and John R. Stein).

analysis was intended to refine the research questions to guide future research; the results are presented below.

All analysis was done in the field with the intention of deriving as much technological information as possible to ascertain if differences in site function might be deduced from the lithic artifacts. Flake attributes examined in the field included completeness, amount and type of cortex, platform type and kind of preparation, number and orientation of dorsal scars, flake type, reduction technology, size, thermal alteration, edge modification, raw material type, and color.

ARTIFACT ANALYSIS

Artifacts from 50 2 x 2-m. sample units at the Great House, the North Complex, Marble Ridge and Ladle Ridge were analyzed in the field (Fig. 2 and Table 2). Sample units were chosen judgementally, but their intrasite location was standardized to: (1) in or adjacent to masonry structures; (2) in open plaza areas with high artifact density; (3) in open plaza areas with low artifact density; and (4) near the apparent site boundaries where artifact density declined. The total 50 sample units comprise only a 0.2 to 0.4% sample of the areal extent of each of the four sites (Table 2). All surface cultural material from each of the selected sample units was analyzed for chronological information and as a basis for making inter- and intrasite comparisons of flaked stone, ground stone, and ceramics. The remainder of this paper concentrates on the lithic analysis with brief summaries of the ground stone and ceramic data (more detail on ceramics may be found in Graves [1990] and Warburton and Graves [n.d.]).

Ground Stone

Grinding stones were present on virtually every site. There are remnants of both metates and manos with little variation in such implements noted. The metates are usually trough types although there are some basin-like forms, and the manos are primarily two-hand style and exhausted. The grinding stones were manufactured from fine-, medium-, and coarse-grained local sandstone, sandstone conglomerate, and occasionally basalt, which outcrop in the area. Given the proximity to the Puerco River, and the suitability of the soils for agriculture, a heavy reliance on cultivated plants is to be expected.

Ceramics

Based on the ceramic analysis, the Navajo Springs site community dates to the Wingate Phase with the construction of the sites at the early Pueblo II period (ca. A.D. 975) and their abandonment in the early Pueblo III period (ca. A.D. 1125). Graves (1990:69), using ceramic data, hypothesized a mean date of A.D. 1055 for the North Complex and a mean date of A.D. 1077 for the Great House.

At each site (Table 2), there were always more sherds than lithics. The highest ratio of sherds to flakes was at the North Complex (4.7:1.0) followed closely by the Great House (4.1:1.0). Marble Ridge had a substantially lower ratio (2.6:1.0) and Ladle Ridge had the lowest (1.8:1.0). Ladle Ridge is located close to a source of raw material and this low ratio underscores the importance of lithic reduction at this site relative to the others. The proximity of the source and the sherd-to-flake ratio lead to a tentative hypothesis of Ladle Ridge as a lithic procurement and initial reduction locale. Marble Ridge, with the next lowest sherd-to-flake ratio, is a large, habitation site where relatively high domestic use of flaked stone is to be expected. In support of its domestic role, the ceramic analysis from Marble Ridge demonstrated that it had the highest relative amount of utility wares. The higher ratios of sherds to flakes at the North Complex and Great House indicate that fewer activities requiring stone tools were undertaken at those loci. There, ceramics played a much greater role.

The following summarizes interpretations derived from a ceramic analysis presented elsewhere (Graves 1990; Warburton and Graves n.d.). We hypothesized a slightly earlier construction of the North Complex than the Great

Table 2
SUMMARY OF IN-FIELD ANALYSIS SAMPLE UNITS FROM THE NAVAJO SPRINGS GREAT HOUSE, THE NORTH COMPLEX, MARBLE RIDGE, AND LADLE RIDGE

Site	Area (sq. m.)	Sample Units	Percent Sample	Number of Sherds	Number of Flakes	Sherd/Flake Ratio	Artifacts per 2 x 2 m. sq.
Great House	19,600	21	0.43	489	118	4.1:1	29
North Complex	18,700	7	0.15	103	22	4.7:1	18
Marble Ridge	35,000	15	0.17	230	92	2.5:1	22
Ladle Ridge	9,600	7	0.29	108	59	1.8:1	24

House. Hypothetically, a group of people came from the Chaco area and settled at the North Complex with the intent of constructing and administering the Navajo Springs Great House. The North Complex, with its low artifact density but relatively high proportion of bowls and decorated sherds, may have been the residence for those people in charge of the Great House construction, and later, its function. Produce, brought in from the fields along the Puerco River by the community inhabitants, may have been stored within the high walls of the Great House. The density, spatial distribution, and number of ceramics indicate possible storage of goods, feasting, ritual destruction of vessels, or some combination of all of the above.

Flaked Stone

From the ceramic analysis, we have derived a fairly rich, but hypothetical, picture of the development of Navajo Springs and its role within the community. How can the lithic analysis contribute more information? As mentioned in the introduction of this paper, we are not sure exactly what aspect of society is analyzed by examining ceramics. A comparable analysis of the flaked stone, that supports or refutes information derived from the ceramics, should provide a clearer picture of the Navajo Springs social and economic structure.

The assemblage examined here is a small sample of the flaked stone present on the sites. A total of 291 flakes was systematically analyzed from the Great House, the North Complex, Marble Ridge, and Ladle Ridge.

At the most general level, the flaked stone assemblage is relatively constant among the four sites. Over 90% of the assemblage consisted of locally available cherts and petrified wood. The reduction technology was primarily the production of flakes from flake cores; approximately 40% of the sample was direct freehand percussion production of flakes and another 10% was identifiable as bipolar flakes. A large proportion (ca. 30%) of shatter supports this combination of direct freehand percussion and expedient bipolar flake technology. Over 40% of the assemblage had cortical or single-facet platforms, another 49% were indeterminate because they were shatter, chunks, or debris, leaving the remainder with crushed or multifacet platforms; platforms were not abraded nor did they appear prepared. The flakes were probably used both unhafted and hafted in relatively short handles as necessary for cutting or other purposes. While the overall assemblage can be thus characterized, a closer look at analytic categories reveals intersite differences.

Raw material (Table 3) at all sites was predominately locally available petrified wood and chert with lesser amounts of quartzite and chalcedony. All of these raw materials occur in deposits that outcrop in the northern section of the project area; raw material is available less than a kilometer from any site in the project

Table 3
RAW MATERIAL TYPES IDENTIFIED IN THE FLAKED STONE ANALYSIS

Material	Great House	North Complex	Marble Ridge	Ladle Ridge
Chalcedony	1%	0	0	0
Chert	55%	36%	45%	57%
Petrified Wood	40%	55%	52%	39%
Quartzite	4%	9%	2%	2%
Obsidian	0	0	0	2%
Siltstone	0	0	1%	0

Table 4
PERCENT OF COMPLETE FLAKES FROM THE LITHIC ANALYSIS

Debitage Type	Great House	North Complex	Marble Ridge	Ladle Ridge
Complete	53%	64%	50%	36%
Broken Flake	14%	5%	16%	7%
Flake Fragment	2%	0	3%	12%
Debris	26%	27%	26%	31%
Chunk	5%	3%	5%	12%

area. The locally available material, then, accounts for 99% of the entire assemblage.

Cortex type was relatively unrevealing and redundant for raw material sourcing. Raw material was obtained from outcrops along the Puerco River that are composed of weathered Sonsela Sandstone beds of the Petrified Forest Member of the Chinle Formation. Within these beds, alluvial cobbles of chert with incipient cone cortex co-occur with naturally weathered chunks of petrified wood.

Thermal alteration of raw materials was observed. The least amount of thermal alteration in any form was at Ladle Ridge (10%), while the most was at Marble Ridge (26%). The thermal alteration appears to be intentional heat treatment and is indicated by changes in color and luster. Each site had a minimum of approximately 10% heat-treated flakes.

Ladle Ridge had the lowest proportion of complete flakes and the highest proportions of flake fragments, debris, and chunks (Table 4). The North Complex had a very high proportion of complete flakes. Completeness, in this assemblage, may be related to the kind of activity being undertaken as opposed to indicating different technologies or reduction techniques (cf. Sullivan and Rozen 1985). The high proportion of checks and flawed material visible in the debitage from Ladle Ridge points to the likelihood that the high percent of broken flakes results from poor quality material, while the higher percentage of whole flakes at the North Complex may indicate removal of flakes from prepared, or at least pre-screened good quality material. Interestingly, Ladle Ridge had the least amount of primary and secondary decortication while the North Complex had the most primary and secondary decortication flakes.

All sites have a high percentage of shatter and indeterminate flakes (Table 5) with most identifiable flakes classed as flakes from direct freehand-percussion flake cores; some flake cores were also present. Bipolar flakes and cores were also present in the assemblage. Ladle Ridge had the least amount of bipolar debitage, at 4% of the assemblage, and the North Complex had the most, at 14% of the assemblage. This is consonant with the hypothesized screening and/or preparing of raw material at Ladle Ridge and further reduction by direct freehand percussion or bipolar at the North Complex. Removal of poor quality material does not require bipolar reduction. About 30% of the flakes from each site were shatter, but in addition, 29% of the Ladle Ridge flakes were included in an indeterminate category, while the North Complex had none that were indeterminate. These indeterminate flakes

Table 5
PERCENT OF FLAKE TYPES IN NAVAJO SPRINGS LITHIC ASSEMBLAGE

Flake Type	Great House	North Complex	Marble Ridge	Ladle Ridge
Indeterminate	12%	0	13%	29%
Core Flake (DFP)	35%	50%	39%	25%
Biface-thinning	1%	0	1%	0
Platform Prep/Edge	3%	0	3%	7%
Shatter	30%	31%	28%	29%
Pressure	1%	0	0	0
DFP Flake Core	3%	0	4%	5%
Bipolar Flake	7%	5%	7%	2%
Bipolar Core	6%	9%	2%	2%
Split Cobble	2%	5%	2%	1%

were chunks, shatter, and debris whose reduction technique could not be identified. The lack of such debitage at the North Complex further supports the notion that this lithic material had been pre-screened or prepared elsewhere.

Only about 6% of the assemblage showed any signs of edge modification; the North Complex had the highest amount and Ladle Ridge the least. Due to in-field analytic procedures, the flakes could not be examined under a microscope, and thus use-wear studies will have to be conducted at a later date.

At all sites, the number of dorsal scars ranged primarily between none and three, but at the North Complex, over 35% of the flakes had four or more dorsal scars compared with only about 15% at the other sites. This indicates less initial reduction and more of the latter stages of manufacture here.

Orientation of dorsal scars in these lithic assemblages was not terribly useful. The majority of flakes with two or more flake scars on the dorsal surface exhibited multidirectional scars. Both the Great House and Marble Ridge had higher proportions of flakes with dorsal scars running unidirectionally from the platform, perhaps indicating greater systematization in flake production.

SUMMARY

What does all this tell us? The following scenario is hypothetical and intended to guide future research. Generally, prehistoric inhabitants of the Navajo Springs community collected and reduced locally available lithic raw material. The reduction and use of flaked stone does not appear to have been a haphazard process. To the contrary, there was apparently pre-screening or preparing of raw material at Ladle Ridge that was then forwarded to other sites. Some material appears to have been heat treated at the community sites, once it left Ladle Ridge. The heat-treatment stage was clearly integral in the production of some stone tools.

Ladle Ridge stands out as a site with a great deal of nonheat-treated, small debris. In contrast, the North Complex lithic assemblage is characterized by a higher percentage of complete flakes with an abundance of scars on the dorsal surface combined with a relatively high amount of cortex. The lithic assemblages from the Great House and Marble Ridge are more similar to each other than to either the North Complex or Ladle Ridge sites. This will require further documentation as the ceramics from Marble Ridge point to its farming and utilitarian function, while the ceramics from the Great House seem to support a community integrative function. It is of interest that so far, the lithic assemblages from these sites do not appear functionally or technologically different, but the ceramics do. This conceivably may reflect specialized gender- or class-related activities that were conducted at one locale, but not another.

Hypothetically, it appears that the inhabitants of Ladle Ridge provided lithic material for the rest of the community. They collected the material from the nearby weathering Sonsela Sandstone beds. They screened its quality by attempting to work it and by so doing, created a substantial amount of chunks and shatter. Petrified wood, in particular, breaks along cleavage planes and much poor quality rock has to be removed to expose the good quality material. The by-products of this process are characterized by less cortex because the natural weathered surface of petrified wood is relatively indistinct, and because large logs have less cortex per unit of noncortical material than smaller cobbles. This observation highlights the need for analysts' familiarity with locally available raw material types, their size ranges, and availability when interpreting various lithic variables.

To continue with this hypothesis, the stone tool laborers of Ladle Ridge gathered raw material; removed the poor quality, unflakeable sections by direct freehand-percussion, and upon finding good quality, flakeable rock, forwarded it to the North Complex (or other community sites) residents for heat treatment and further reduction, perhaps in exchange for agricultural products. Interestingly, the presence of cortex on flakeable material, such as observed at the North Complex, did not appear to lessen its utility, further arguing for an expedient flake technology where the desired end product was a straight cutting edge. Once the inhabitants of the North Complex had a workable piece of material, they continued to reduce it using an admixture of direct freehand-percussion and bipolar techniques as necessary.

Obviously, there were stone workers at all of these sites, but the far ends of the spectrum are reflected by the Ladle Ridge laborers and the more specialized producers of flakes and tools at the North Complex.

The use of flaked stone tools in daily domestic activities, as well as in planting, harvesting, and processing of agricultural crops and gathered plants, is not well understood. In an organized community setting, such as the Navajo Springs community, it is only logical to see some specialization of labor reflected in the procurement of raw material and the manufacture of stone tools. Of interest for future research are the instances where the results of the flaked stone analysis are dissimilar from the ceramic analysis. It is in these interstices that the roles of different social groups may be reflected.

Technological analysis of the flaked stone in conjunction with ceramic analysis provides a potentially more complete picture of life at a prehistoric Pueblo, than separating the two analyses. Southwesternists must try to infer prehistoric human behavior from lithic assemblages and compare it with inferences derived from ceramics. If the same conclusions are reached, the argument is only strengthened, but if different activities are reflected, these analyses may be enabling us to distinguish prehistoric roles differentiated by gender or social standing.

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