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CONTENTS

ARTICLES AND REPORTS

- A Case of Mistaken Identity:
The Misuse of Artifactual Basketry in the
Prehistoric Great Basin.....** Page 15
Chris Horting

SHORT CONTRIBUTIONS

- A New Radiocarbon Date on a Maize
Cob from Diversion Dam Cave (10-AA-99)** 23
Robert M. Yohe II
- Obituary: John H. Schaertl, 1920-2000** 25
Mark G. Plew

ARTICLES AND REPORTS

A CASE OF MISTAKEN IDENTITY: THE MISUSE OF ARTIFACTUAL BASKETRY IN THE PREHISTORIC GREAT BASIN

Chris Horting

INTRODUCTION

From an archaeological perspective, textiles/basketry is one of the oldest artifact classes – excepting lithic tools – recognized throughout the world. Extending back greater than 10,000 years, specimens recovered from dry caves throughout the North American Great Basin comprise an artifactual record considered the best-controlled basketry sequence anywhere in the world to date (Adovasio 1986:194). As an archaeological artifact class, this record easily lends itself to quantitative as well as qualitative analysis. Basketry has been subject to taxonomic analysis, “typed” and assigned to discrete categories on the basis of *manufacturing technique* (this is exemplary of many artifact classes and the hallmark of culture-historical methodologies). These resulting distinctions have been ascribed to specific cultural/ethnic/linguistic groups, based on the operating assumption that seemingly inconsequential technical attributes (i.e., methods of construction) are localized, very conservative, and *culturally determined* (Adovasio 1977:1-4).

Twined and coiled basketry construction methods have been most notably used by researcher James Adovasio for identifying distinctive cultural groups and establishing population movements, specifically for characterizing the demise of the Prehistoric Fremont culture (of western Utah) and consequent expansion of the Numic speakers throughout the Great Basin. Yet relying on one artifact class to establish “ethnic identity and spread” is in itself problematic. This paper makes use of the same data concerning basketry construction and materials to discuss briefly the political/legal implications of a seemingly innocuous archaeological debate, dispute the so-called “Numic Spread,” and argue instead for long-term cultural continuity within the eastern Great Basin.

A MATTER OF DEFINITIONS A GEOGRAPHICAL AND

ARCHAEOLOGICAL/HISTORICAL GREAT BASIN

The Great Basin of western North America is defined topographically as a large interior basin, encompassing

most of Nevada, eastern Utah, eastern California, south-central Oregon, southeast Idaho, and adjacent southwestern Wyoming. It is characterized by internally-draining watersheds, such as the Truckee, Walker, Carson, Humbolt, Reese, Sevier, Weber, Jordan, and Bear Rivers – all of which discharge into interior lakes or valley floors, or sinks. Physiographically a component of the “Basin and Range” physiographic province, it is distinguished by wide desert valleys flanked by massive, north-south, parallel mountain ranges bounded by the Sierra Nevadas, the Colorado Plateau, Rocky Mountain complex, and Colombia Plateau. Overall, the Basin is high in elevation, with valley floor elevations ranging from 2,500 to 6,000 ft, with average maximum relief hovering around 5,800 ft from mountain top to valley bottom (Grayson 1993:11-18).

Within the Basin’s northern half, ecozones are indicative of a cold desert climate, with tall sagebrush the dominant plant community throughout the numerous valleys, giving way to piñon/juniper woodlands along the foothills, with subalpine communities, and alpine tundra dominating the upper elevations. The long, north-south trending valleys, characterized by internally-draining mountain streams, create permanent as well as seasonal (pluvial) lakes and marshes. In addition, large, permanent wetlands, the remnants of large Pleistocene fresh-water lakes support a wealth of plant and animal resources (Grayson 1993:24-81). Indeed, any riparian area – whether permanent or ephemeral valley wetlands, seeps, or stream marshes – reveal a long and continuous record of human activity. These wetland/riparian areas sustain a variety of materials utilized not only as food resources (plants as well as fish, bird, and terrestrial fauna), but also as “storehouses” for virtually all cultural material needs – as components of various species of plants were used for clothing, house construction, tools, containers, and the like (Harper 1986:55).

From an archaeological perspective, evidence for human occupation within the Great Basin spans some 11,000 years, from the Paleoindian period to the present,



Figure 1. Great Basin hydrographic map. (After D'Azevedo, 1986.)



Figure 2. Great Basin physiographic map. (After D'Azevedo, 1986.)

Basin-wide Numic-speakers of the Protohistoric and Historic time frame preceding 600 B.P. (post-1,350 A.D.) (D'Azevedo 1986:8).

What is consequently considered the Great Basin culture area thus mirrors the incredible variability in topography, flora, and fauna that is found in the physiographic Great Basin. A mix of survival strategies – from highly mobile foragers to relatively sedentary hunting/gathering groups, and a mixed strategy of foraging and sedentism – were successfully adopted and utilized throughout the Basin and across time.

A DEFINITION AND DISCUSSION OF BASKETRY

Basketry refers not only to baskets per se, but also to a variety of rigid and semi-rigid objects – clothing, shoes, mats, blankets, cradle boards, cordage, house coverings, utensils, fish traps and weirs, even shallow water boats – made of the same or of similar materials and techniques. In an effort to narrow the definition of “basket,” 3-dimensional woven containers (including cradle boards), rather than 2-dimensional items, such as woven bags, textiles and footwear, and made without use of a frame, or loom, are specifically relegated to the artifact class of “basketry” as opposed to woven technologies. While this is not necessarily standard archaeological analytical prac-

and characterized by a variety of behavioral responses resulting from changes in climate. The Paleoindian emphasis on megafaunal hunting (11,000 - 8,000 B.P.) shifted to an Archaic emphasis on procurement of smaller mammals and seed and root collecting (8,000 - 800 B.P.). A foraging economy was utilized in tandem with horticultural practices by the Prehistoric Fremont of the eastern Great Basin for the period ca.1,600 - 600 B.P. (400-1,350 A.D.) (Grayson 233-270), and Historic Southern Paiute of the southern Great Basin (Steward 1938:234-235). In addition, highly mobile, foraging strategies were practiced by inhabitants contemporary with the Fremont of the central and western Basin, as well as the

Basin-wide Numic-speakers of the Protohistoric and Historic time frame preceding 600 B.P. (post-1,350 A.D.) (D'Azevedo 1986:8).



Figure 3. Topographic relief map of the Great Basin.



Figure 4. Great Basin culture area. (After D'Azevedo.)

northwest Nevada) is characterized by 13 basketry classes: seven twined and six coiled construction techniques. The area is further divided into three chronological sequences: Stage I (11,000-7,000 B.P.), Stage II (7,000-1,100 B.P.), and Stage III (1,100-400 B.P.). Early undecorated Z-twist simple close and open forms (i.e., bags, mats, burden baskets, trays) are supplemented by decoration, diagonal twining, coiling, and additional forms (bowls, water jugs, seed beaters, a triangular winnowing tray).

The Western Basin area (central and western Nevada and contiguous portions of California) is delineated by 16 wall techniques: seven coiled, eight twined, and Lovelock Cave plaited wickerware. Five chronological periods spanning the period 11,000-200 B.P. are recognized, with vessel forms and construction techniques comparable to the Northern area, with the addition of the twined cradle board. S-twisted wefts appear in specimens dated circa 6,500 B.P., and coiling with multiple rod foundations first appear 6,500-4,000 B.P. Multiple rod foundation coiling increases concomitantly with decreases in twining techniques until 1,000-200 B.P., when twined specimens again increase in archaeological con-

tice (Connolly 1994: 63-64), it is the definition adopted by Adovasio (1986b:1) which will be followed for purposes of this discussion.

Basketry in the Great Basin has been divided into three general “types”—twining, plaiting, and coiling – each comprising an array of attributes (i.e., starts, foundations, stitch type, stitch direction, wall construction) that together have been used by researchers to define various “classes,” or subdivisions within each “type.” Subsequently, through comparative analysis, three distinct manufacturing regions for the Great Basin have been identified and described (Adovasio 1986b; Connolly 1994; Fowler 1994).

The Northern Basin area (south-central Oregon, adjacent northern California and

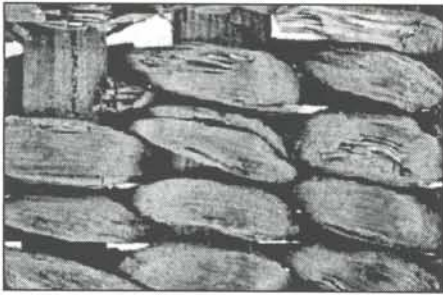


Figure 5. Close-up of coiled stitching.



Figure 6. Close-up view of twined stitching.



Figure 7. Twill plaited example.

texts. The short-lived and geographically restricted Lovelock wickerware (a simple plaiting, or plain-weave technique) appears around 3,000 B.P. before disappearing from the archaeological record by 1,000 B.P. Decorative techniques appear later than in the Northern area, and include feathers in addition to naturally colored as well as dyed materials.

The Eastern area (western Utah and adjacent areas in Wyoming, southern Nevada, southern Idaho, and north-west Colorado) includes 19 wall techniques: eight twined and eleven coiled. Also divided into five chronological sequences (11,000-200 B.P.), the oldest twined specimens are unique S-twists, with coiling appearing after 8,500 B.P., and completely dominating basketry assemblages by 6,500 B.P. with the greatest variety of coiled forms in the entire Basin. The one-rod and bundle stacked coiled technique appears by 4,000 B.P., and persists (along with multiple rod foundations) until 800-600 B.P., when twining once again increases, with the appearance of new forms of seed beater and winnowing trays.

The raw materials used in basketry reflect the variability and range of plant sources throughout the Great Basin. Within the Northern area, at archaeological sites associated with lakeside biomes, tule (*Scirpus*) was the

most common material used in fine twining. Cattail (*Typha*) and occasionally sagebrush (*A. Tridentata*) was also used, although sage is more commonly found in coarsely twined specimens. Willow (*Salix sp.*) was also utilized for both coarsely twined and coiled examples. In lacustrine habitats that are associated with sites of the Western area, tule, cattail, cane (*Phragmites sp.*), and Indian hemp were used in twining, while willow was most commonly used in coiling, both as foundation and warp materials. Throughout the Eastern area, a more diverse array of plant materials was used, perhaps reflecting the scarcity of lacustrine resources and thus greater mobility of its inhabitants. Sandbar willow was the most common material used for both twining and coiling, although milkweed, Indian hemp, tule, cattail, cedar bark, cliff rose, white sage, dogwood, and squawbush (*Rhus trilobata*) were all extensively utilized (Adovasio 1986:194-203; Connolly 1994:77-81).

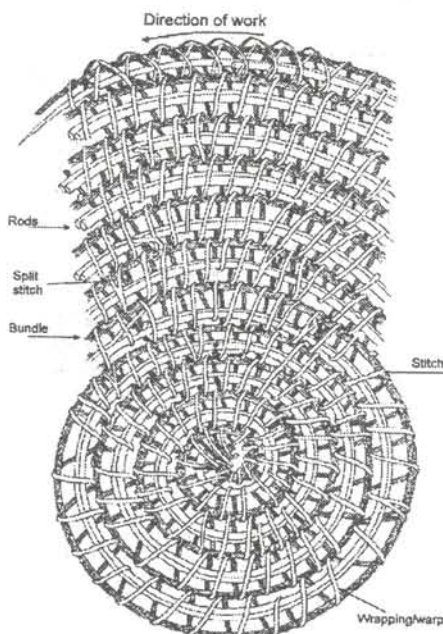


Figure 8. Schematic of coiled basketry.

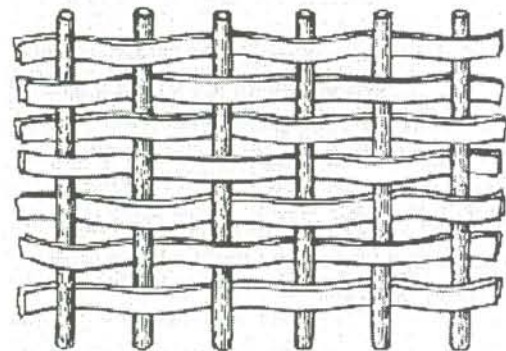


Figure 9. Lovelock Wickerware.

In comparing the three basketry manufacturing regions, some patterns become apparent. Twining as a technique appears first – during the end of the Pleistocene/early Holocene, marked by increased temperatures, extensive marshes, wetlands, and lacustrine resources, and changing floral and faunal communities in the Basin (Grayson 1993:194). Twining persists chronologically in a wide variety of forms until Euro-American contact. Evidence for coiling, however, is restricted for some 2,000 years to the Eastern region, before diffusing to the Western, and subsequently from the Western to the Northern area. While twined basketry is considered to be associated with the processing – parching or roasting – of larger seeds and nuts, coiled vessels are associated with small

seed processing (i.e., pickleweed, iodine bush) (Adovasio 1986:203-205). Interestingly, coiled forms make their earliest appearance in the archaeological record during the mid-Holocene, a time of gradually increasing aridity that includes arrival of piñon pine into the Great Basin. The one-rod and bundle stacked coiled technique persists in the Eastern area until 600 B.P., when evidence implicates a change in the length of growing season and decreases in the amount of warm and moist air from Gulf air masses, which would effectively limit the crop yields of Fremont horticulturalists (Grayson 1993:217-268). Thus, the appearance of basketry and its various construction techniques as an artifact class is reflective of broad environmentally-related adaptive strategies to climatically changing and geographically restricted floral resources. Specifically, coiling techniques and associated basketry forms can be interpreted as related to *subsistence strategy*, rather than the defining criteria of *population movement*, which has been the accepted *raison d'être* for the rise and demise of the Prehistoric Fremont in the eastern Great Basin.

"COILED BASKETS R US..."

The prehistoric archaeological culture that inhabited the eastern Great Basin/northwestern Colorado Plateau circa 1,750-600 B.P. (200 -1,350 A.D.), and labeled "Fremont," has been the focus of a substantial amount of speculation and research since its identification by Noel Morss in 1931 as a culture separate and distinct from the more southerly, contemporaneous ancestral Puebloan (Anasazi) (Madsen 1989:19). Originally regarded as being contained within the modern political boundaries of Utah (Jennings 1978:155), Fremont artifactual traits have since been recognized in southern Idaho (Butler 1983:8; Madsen 1989:3), eastern Nevada (Wilde 1992:39), and southwestern Wyoming (Smith 1992:72). Thus, the eastern Great Basin is referred to as essentially "Fremont" for purposes of this discussion.

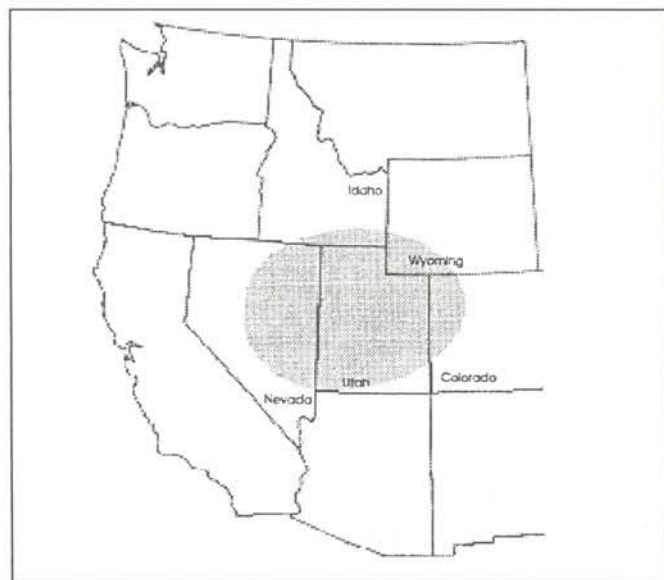


Figure 11. Shaded area represents extent of archaeologically defined Fremont culture. (After Madsen, 1898.)

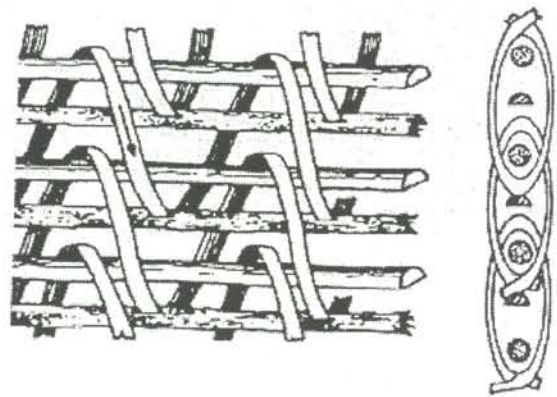


Figure 12. Side and cross-section of Fremont rod-and-bundle coiled basketry.

The Fremont are assumed to have developed in-situ from an earlier, Archaic base. The move from an essentially foraging existence to an increasingly sedentary lifestyle involving the cultivation of the domesticate triad – corn, beans, squash – is echoed in the associated artifact trait list – pottery, coiled basketry, food storage, architectural features, and a host of projectile points reflecting replacement of the atlatl with the bow and arrow. Climatic and environmental changes, coupled with the assumed diffusion of horticulture from the southwest, is repeatedly cited for this change in subsistence patterning (Jennings 1978:155-156). This basically homogenous portrayal of the Fremont as sedentary farmers dependent on corn has since been revised to incorporate evidence for sedentary village subsistence based on wild resource utilization, such as a dependence on cattails noted at Backhoe Village (Madsen 1987:88), and full-time hunting and gathering subsistence practices reflected in temporary procurement sites such as Topaz Slough that nonetheless include Fremont artifacts, and are therefore defined as Fremont (Simms 1986:215; Smith 1992:72). It is due to this diversity in subsistence and settlement strategies that these peripheral areas, only marginally conducive to horticulture but nonetheless displaying the Fremont technological assemblage, have been included under the Fremont cultural nomenclature (Madsen and Simms 1998:258).

Adovasio has become the most prolific commentator on the artifact class of basketry in the Great Basin. He has championed the view that ethnic identity and population movement can only be discerned through basketry, based on the premise that *no two individuals nor ethnic groups have ever produced baskets in the same fashion*. This telling quality can be most readily observed through examination of the basket wall, or main body, the most significant aspect in manufacturing technique (Adovasio 1994:115-116). Specifically, he claims the uniqueness of Fremont coiled basketry and its disappearance from the archaeological record by 650 B.P. (1,300 A.D.) to be irrefutable proof of Numic incursions into the eastern Great Basin. This claim is made on the presence of one particular manufacturing technique – close-coiled, rod-and-bundle-stacked foundation – which ac-

counted for 50% of the baskets he sampled in 1979. However, three additional types, in varying frequencies, were also noted and discussed as characteristic also of Fremont basketry: half-rod-welt-stacked, whole-rod, and three-rod-bunched. Twined specimens, while much rarer, were also observed in Fremont sites, but no one particular twining method was found in greater frequency than the others (Adovasio 1979:724-728). These so-called Fremont coiled foundations – one-rod, three-rod-bunched, half-rod-and-bundle-stacked – are also reported in ancestral Puebloan basketry specimens (Morris and Burgh 1941:9-12), contemporaneous southern neighbors to the Fremont.

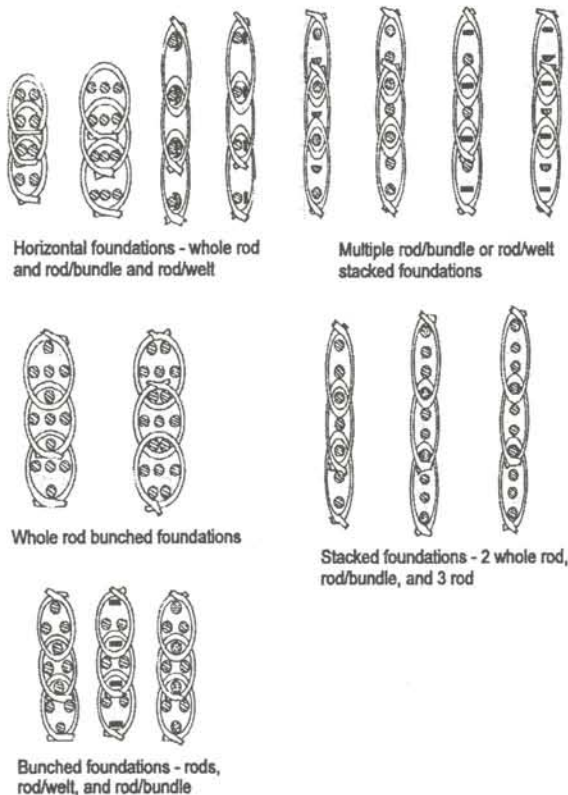


Figure 13. Examples of Fremont coiled foundations. (Modified after Adovasio 1977, 61.)

In an analysis of basketry specimens from southern Idaho, Adovasio examined 15 prehistoric specimens housed in the Idaho Museum of Natural History. The wall construction of all but one were identified as either whole-rod-and-welt stacked, half-rod-and-welt stacked, half-rod-and-bundle stacked, or three-rod-bunched foundations, and declared to "...fit comfortably and conformably within the general milieu of Fremont basketry...." (Adovasio et al.1981:24). However, a subsequent analysis of ethnographic Numa samples from the Idaho Museum of Natural History, the Nevada State Museum, and the Utah State Museum yielded different results. Four types of coiled basket wall construction were observed: whole-rod, three-rod-stacked, two-rod horizontal, and three-rod-bunched. No perceived similarities or continuities between ethnographic Shoshoni and Fremont or "Fremont-like" technique were noted,

despite the continued presence of both one-rod and three-rod-bunched foundations between the prehistoric and ethnographic specimens. No mention was made of any comparison between examples of twined Fremont and non-Fremont or post-Fremont specimens.

The Promontory Caves in northern Utah have yielded coiled basketry fragments described as having single-rod, and single-rod-and-bundle foundations. Found in stratigraphic association with artifacts subsequently cross-dated to other sites east and south of the caves, the resultant dates would suggest the persistence of "Fremont" coiled basketry well into the sixteenth century (Janetski 1994:171). This apparently has caused Adovasio some consternation, as his dates for the disappearance of the one-rod-and-bundle Fremont basket were revised in 1986 from a definitive 650 B.P. (1,300 A.D.) to sometime between 750-150 B.P. (1,200-1,800 A.D.), or later (Adovasio 1986:202). This uncertainty as to whether "Fremont" basketry can even be ascribed solely to the Fremont, let alone demarcating their disappearance in the archaeological record, exemplifies the failure of one line of artifactual evidence in providing any certainty regarding a purported population displacement commencing in the fourteenth century.

...IMPLICATIONS FOR THE ARCHAEOLOGICAL RECORD

The archaeological record used to define "Fremontness" is used also to mark its demise. Artifactual materials – of which basketry has played a major role – have been interpreted to show a clear discontinuity dated 650 - 600 B.P. (1,300-1,350 A.D.), between this Fremont material tradition, and that generally ascribed to highly mobile, Numic-speaking foragers, the occupants of the Great Basin at the time of historic contact. Climatic degradation (including resulting shifts in floral and faunal habitats) is considered the impetus for this shift in population, but linguistic evidence has provided the "icing on the cake" to this scenario. The division of Numic languages 1,000 years ago indicates movement north and eastward from the "Numic homeland" in the southwestern Great Basin (Lamb 1958:99), effectively replacing an already abandoned Fremont area, or outcompeting a people already in the throes of ecological stress (Jennings 1978:235). Adovasio claims that the basketry of these "Numic speaking intruders" is sufficiently dissimilar from their Fremont predecessors as to preclude any historical relationships (Adovasio 1975:73) and argues forcefully for an abrupt discontinuity from one *cultural group* to another, rather than considering a transition from one *subsistence strategy* – based on changing floral habitats and species availability – to another.

This "Basketry = People" concept has been adopted as not only a neat and convenient method of explaining differences in the artifactual record, but has also been accepted *a priori* in trying to fit the archaeological record to the interpretation. Dr. B. Robert Butler has advocated the view of a Fremont presence in the Snake/Salmon River

country of southern Idaho long after the supposed demise in Utah by 650 B.P. Accepting the contention that no other artifactual trait is more typically Fremont than that of basketry, Butler discounts exchange as a justification for the presence of “quintessential Fremont” basketry fragments uncovered during excavations in Jackknife Cave, Little Lost River Cave no. 1, and Pierce Duernig Cave. Radiometric analysis dates these fragments at “A.D. 1,110 ±125 years,” ... and “A.D.1,790 ± 135 years” (Butler 1979:6), the late date being well beyond the 550 B.P. (1,400 A.D.) date of accepted Fremont disappearance. Thus the presence of Fremont baskets “cannot be explained by trade” (Butler 1979:6; 1981:13-14). Butler attempts to account for late Prehistoric/Protohistoric Shoshoni occupants, whose basketry had been previously identified as “Fremont-like,” by surmising that the recently arrived Numic-speakers introduced a different set of basketry techniques in one area (post-Fremont Utah) but abandoned those techniques in another (southern Idaho) in favor of those used formerly in the first area (Fremont Utah and Idaho). In other words, newly arrived Shoshonean speakers would have adopted the basketry techniques as practiced by the Fremont in Idaho (but not in Utah), therefore (according to Butler) requiring the co-existence of *two distinct cultural groups* in the Snake River/Salmon River country to make sense of the archaeological record. This situation existed until other, later Numic groups expanded into southern Idaho sometime before Historic contact (Butler 1979:6), producing and discarding basketry materials displaying “true Numic construction methods.”

... AND THE POLITICAL IMPLICATIONS

Since the passage of the Native American Graves Protection and Repatriation Act (NAGPRA) by Congress in 1990, what had been considered an academic debate concerning the so-called “Numic spread” has become a political skirmish vying for control of the archaeological record and recognition for tribal self-determination. NAGPRA requires federal land-administrative agencies to identify certain cultural items found during the course of cultural resource activities – human burials, associated burial goods, sacred objects and items of cultural patrimony – as “belonging” to a particular Native American affiliation. Such items are then repatriated to the “most probable descendants,” with archaeological data used to establish ethnic relatedness when conflicting or multiple claims are made. In the Great Basin specifically, cultural affinity is based largely on the dating of, or relation to, associated archaeological evidence (such as datable charcoal and other organic materials), which is constructed primarily from studies relating to a single artifact or collection of artifact features that have been classified and assigned an ethnic label – with “the most convincing and prolific being Aodvasio’s basketry analyses...” (Barker and Pinto 1994:17-18). Claims are consequently considered or rejected made on the basis

of this “Pre-Numic” or “Numic” temporal division. Thus the political implications of assigning an ethnicity developed from an artifact class is not only a dangerous legal precipice, but is also in direct conflict with a common Native American view as the progeny of indigenous people who “have always been here” and are accordingly not constrained by chronological boundaries in seeking to gain control of the material cultural remains of their ancestors.

....IN CONCLUSION

In reviewing basket manufacturing techniques, differences noted within the Great Basin are just as great as in comparison with contiguous areas such as the ancestral Puebloan of the Southwest and Washoe of California. Owing to the fact that the material culture of several areas within the Basin – such as the Western Shoshoni of southern California/Nevada – are poorly defined archaeologically and ethnographically, comparisons and resultant ethnic assignments have been based on a small sample of mostly non-dated specimens (Fowler 1994:112), and poorly developed local cultural chronologies (Madsen and Rhode 1994:3). While certain manufacturing techniques may indeed be specific to one cultural or ethnic group – such as the absence of twill plaited baskets north of the Colorado River (Scott Ortman, personal communication 1999), or Lovelock wickerware, which has no ethnographic equivalent and appears archaeologically within a narrow time frame and location (Fowler 1994:105) – vessel function *and incorporated designs* must both be weighted as indicators of ethnic affinity. And while the link between ethnic affiliation and material culture has been extensively documented (D’Azevedo 1986; Feest 1992; Furst 1982; Hegmon 1995; Steward 1941, among others) in material classes such as clothing (i.e., headdresses, footwear), weaponry (arrow shafts, bows), and architecture, those differences are based at least equally on incorporated *style* – including motifs and designs – than simply and solely upon construction and manufacturing technique (Horting 1997:7).

The “*X = People*” Equation (where *X* = [any artifact class]) has often been used in Great Basin studies to develop and structure the *Invading Numa* model to explain changes observed in the artifactual record. Rather than accepting this scenario upon which population displacement and replacement has been constructed, other hypotheses should be considered and tested. Modification in subsistence strategies and resultant technological changes, for example, is a valid and viable line of inquiry for explaining differences in the material culture. As such, it avoids the pitfall of attempting to explain, without substantive archaeological evidence, the displacement of a highly successful population, (successful by virtue of intimate familiarity with the environment), by a newly arrived, immigrant group operating under a major disadvantage (i.e., unfamiliarity with the environmental constraints of its new locale) but who nonetheless out-competes and overwhelms their predecessors.

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REFERENCES CITED

- Adovasio, James M.
1975 Fremont Basketry. *Tebiwa* (17):67-76.
- 1977 **Basketry Technology: A Guide to Identification and Analysis**. Aldine Publishing, Chicago.
- 1979 Comment to Madsen's article, "New Views on the Fremont." *American Antiquity* 44:723-729.
- 1986 Prehistoric Basketry. In **Great Basin**, edited by Warren D'Azevedo, pp.194-205. Handbook of North American Indians, vol. 11, William C. Sturtevant, general editor, Smithsonian Institution, Washington D.C.
- 1994 A Tisket, A Tasket: Looking at the Numic Speakers Through the "Lens" of a Basket. In **Across the West: Human Population Movement and the Expansion of the Numa**, edited by David Madsen and David Rhode, pp.114-123. University of Utah Press, Salt Lake City.
- Adovasio, James M. and Rhonda Andrews
1986 Artifacts and Ethnicity: Basketry as an Indicator of Territoriality and Population Movements in the Prehistoric Great Basin. In **Anthropology of the Desert West: Essays in Honor of Jesse D. Jennings**, University of Utah Anthropological Papers 110, edited by Carol Condie and Don Fowler, pp. 43-89. University of Utah Press, Salt Lake City.
- Adovasio, James M., R.L. Andrews, and C.S. Fowler
1981 Some Observations on the Putative Fremont "Presence" in Southern Idaho. *Plains Anthropologist* 26(91):19-26.
- Barker, Pat and Cynthia Pinto
1994 Legal and Ethnic Implications of the Numic Expansion. In **Across the West: Human Population Movement and the Expansion of the Numa**, edited by David Madsen and David Rhode, pp.16-19. University of Utah Press, Salt Lake City.
- Butler, B. Robert
1979 A Fremont Culture Frontier in the Upper Snake River and Salmon River Country? *Tebiwa* (18):1-10.
- 1981 When Did the Shoshoni Begin to Occupy Southern Idaho? Essays on Late Prehistoric Cultural Remains From the Upper Snake and Salmon River Country. *Occasional Papers of the Idaho Museum of Natural History* 32:1-27.
- Connolly, Thomas J.
1994 Prehistoric Basketry from the Fort Rock Basin and Vicinity. In **Archaeological Researches in the Northern Great Basin: Fort Rock Archaeology Since Cressman**, University of Oregon Anthropological Papers 50, edited by C. Melvin Aikens and Dennis L. Jenkins, pp. 63-84. Department of Anthropology, University of Oregon, Eugene.
- D'Azevedo, Warren L., (editor).
1986 Introduction. In **Great Basin**, pp. 1-14. Handbook of North American Indians, vol. 11, William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.
- Feest, Christian F.
1992 **Native Arts of North America**. Oxford University Press, New York.
- Fowler, Catherine
1986 Subsistence. In **Great Basin**, edited by Warren D'Azevedo, pp. 64-97. Handbook of North American Indians, vol. 11, William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.
- 1994 Material Culture and the Proposed Numic Expansion. In **Across the West: Human Population Movement and the Expansion of the Numa**, edited by David Madsen and David Rhode, pp. 101-113. University of Utah Press, Salt Lake City.
- Grayson, Donald K.
1993 **The Desert's Past: A Natural Prehistory of the Great Basin**. Smithsonian Institution, Washington, D.C.
- Harper, Kimball T.
1986 Historical Environments. In **Great Basin**, edited by Warren D'Azevedo, pp. 64-97. Handbook of North American Indians, vol. 11, William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.
- Hegmon, Michelle
1995 The Social Dynamics of Pottery Style in the Early Puebloan Southwest. Occasional Paper No. 5, Crow Canyon Archaeological Center, Cortez, Colorado.
- Horting, Chris
1997 **Form and Function vs. Design and Detail: An Analysis of Basketry in Discerning Ethnicity from Four Population Groups in the American West**. Manuscript on file, Anthropology Dept., Idaho State University, Pocatello, Idaho.
- Janetski, Joel
1994 Recent Transitions in the Eastern Great Basin: The Archaeological Record. In **Across the West: Human Population Movement and the Expansion of the Numa**, edited by David Madsen and David Rhode, pp. 157-178. University of Utah Press, Salt Lake City.
- Jennings, Jesse D.
1978 **Prehistory of Utah and the Eastern Great Basin**. University of Utah Anthropological Papers 98. University of Utah Press, Salt Lake City.
- Madsen, David
1989 **Exploring the Fremont**. University of Utah Occasional Publication No. 8. University of Utah Press, Salt Lake City.
- Madsen, David and David Rhode, editors
1994 Introduction. In **Across the West: Human Population Movement and the Expansion of the Numa**, pp. 3-5. University of Utah Press, Salt Lake City.
- Madsen, David and Steve Simms
1998 The Fremont Complex: A Behavioral Perspective. *Journal of World Prehistory* 12:255-336.
- Morris, Earl H. and Robert F. Burgh
1941 **Anasazi Basketry: Basket Maker II Through Pueblo III - A Study Based on Specimens from the San Juan River Country**. Pub. 533. Carnegie Institution, Washington, D.C.
- Simms, Steven R.
1986 New Evidence for Fremont Adaptive Diversity. *Journal of California Great Basin Anthropology* 8:204-216.
- Smith, Craig
1992 The Fremont: A View from Southwest Wyoming. *Utah Archaeology* 5(1):55-76.
- Steward, Julian H.
1941 Cultural Element Distributions, XIII Nevada Shoshoni. *University of California Anthropological Records* 4(2):209-359.
- 1997 **Basin-Plateau Aboriginal Socio-political Groups**. Reprinted. University of Utah Press, Salt Lake City. Originally published 1938, Bulletin 120 Bureau of American Ethnology, Smithsonian Institution, Washington, D.C.
- Wilde, James
1992 Finding A Date: Some thoughts on Radiocarbon Dating and the Baker Fremont Site in Eastern Nevada. *Utah Archaeology* 5(1):77-100.

SHORT CONTRIBUTIONS

A NEW RADIOCARBON DATE ON A MAIZE COB FROM DIVERSION DAM CAVE (10-AA-99)

Robert M. Yohe II

In the early 1980s, a local artifact collector named John Dixon found a lava tube a short distance east of Diversion Dam near Boise, Idaho (Fig. 1). Dixon dug within this lava cave and discovered numerous artifacts and ecofacts, including a bone harpoon, cordage, basketry, and desiccated fish remains. Among the ecofacts were two small maize cob fragments (Fig. 2) buried deep within the midden in the cave. Dixon later reported to Ken Swanson and Tom Green of the Idaho State Historical Society that he had dug to a depth of eight feet in the front half of the cave and still did not hit the bottom of the archaeological deposit. The site was officially recorded as 10-AA-99 after a visit by Green and others in 1983 and was later named Diversion Dam Cave by the author during his tenure as Idaho State Archaeologist. Some of the artifacts and the two corn cobs were loaned to the Historical Society for analysis.



Figure 1. Approximate location of Diversion Dam Cave (10-AA-99) in southern Idaho.

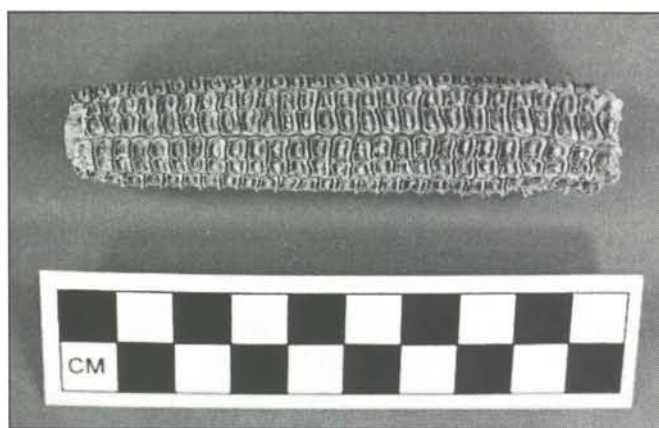


Figure 2. Maize cobs from Diversion Dam Cave. The upper cob was the one specimen analyzed by King (1992) and also subjected to sampling for AMS radiocarbon analysis 1999.

Some years later, Tom Green submitted one of the cobs (Fig. 2, upper) from 10-AA-99 with a few other archaeological maize cob pieces known to come from southern Idaho and eastern Oregon to paleobotanist Frances King at the University of Pittsburgh. Her analysis of the Diversion Dam Cave specimen (the most complete of the two cobs) revealed a 12-rowed cob that was most similar to "Pueblo races (Navajo Red or Hopi)" suggesting that it represented a modern or historic form of maize (King 1992). This conclusion originally suggested that the corn from Diversion Dam Cave could be evidence of trade with southern or Plains peoples sometime during the early Historic occupation of the site. However, in 1999, as State Archaeologist, I submitted a sample of the cob analyzed by Frances King to Beta-Analytic for radiocarbon dating since I was intrigued by the presence of corn at this site and believed that a radiometric assessment would be informative. The result of this analysis was an AMS radiocarbon date of 1,200 +/- 50 r.c.y. B.P.[UCR-3804/ CAMS-59164], (approximately A.D. 800) which eliminated the hypothesis that the corn was acquired in Protohistoric or Historic times.

Maize remains in archaeological contexts are very rare north of Fremont-aged archaeological sites in Utah. Two small maize cobs were recovered from Robinette Cave in Hells Canyon in the 1950s (Caldwell and Mallory 1967). Three additional cobs have been recovered and analyzed from Bigfoot Bar and an unnamed rockshelter on the Snake River near Rock Island, Oregon, all of Pueblo-type races of maize (King 1992). Interestingly, early Historic accounts of the Boise River Canyon refer to "Indian Gardens" (Larry Jones, personal communication 1998). However, the Diversion Dam radiocarbon date seems to suggest a Fremont connection, perhaps trade or a "pioneer" Fremont encampment in the Boise River Canyon.

Fremont-aged, 12-rowed corn is known from Hogup Cave (Cutler 1970) in northwestern Utah, within 150 km. of the Boise Valley. A Fremont presence in southern Idaho has been suggested by Butler (1983) based on the presence of Fremont ceramics, figurines, and pictographs at several localities. Whether these items represent an actual Fremont presence, or merely the result of trade, is an important question in Idaho prehistory yet to be addressed fully. It is likely that professional archaeological investigations within Diversion Dam Cave could help shed further light on the role of maize in the aboriginal diet and the presence of or possible interaction with Fremont peoples.

REFERENCES CITED

Butler, B. Robert

- 1983 The Quest for the Historic Fremont and A Guide to the Prehistoric Pottery of Southern Idaho. Pocatello, Idaho: Occasional Papers of the Idaho Museum of Natural History, No. 33.

Caldwell, Warren W. and Oscar L. Mallory

- 1967 Hells Canyon Archaeology. River Basin Surveys, Museum of Natural History, Smithsonian Institution Publications in Salvage Archaeology No. 6.

Cutler, H. C.

- 1970 Corn From Hogup Cave, a Fremont Site. Appendix VII in: Hogup Cave, by C. Melvin Aikens, pp. 271-272. University of Utah Anthropological Papers No. 93.

King, Frances

- 1992 Maize from Southwestern Idaho Sites. Report on file, Idaho State Historic Preservation Office, Boise.

OBITUARY

JOHN H. SCHAERTL 1920-2000

John Schaertl passed away May 13, 2000 in Boise, Idaho. With his death, the Idaho archaeological community lost one of the last founding members of the Idaho Archaeological Society. John was born January 12, 1920 at Stevensville, Montana. Graduating from the University of Montana, he began his teaching career at Shامت, Montana, where he met Florence Powers, whom he married in January, 1942 in Minneapolis, Minnesota. Following his discharge from the United States Army in 1944, John and Florence taught near Montreal, Canada for a number of years. In 1949 they moved to Caldwell, Idaho, where they continued to teach until 1961. Moving to Boise in the same year, John taught at Borah High School until his retirement in 1983.

From his childhood days in Montana, John had developed a life-long interest in archaeology. After moving to Idaho, John and Florence began to visit and record archaeological sites in southwestern Idaho, eastern Oregon and northern Nevada. Without formal training in archaeology they read extensively, sought the support of local archaeologists, and attempted to coordinate their efforts with the state survey developed by Dr. Earl H. Swanson Jr. Wanting to share their knowledge and to foster the preservation of archeological sites, they were instrumental in founding the Idaho Archaeological Society in 1971. John served the society in a number of capacities and was particularly supportive of the *Idaho Archaeologist*, the journal of the Idaho Archaeological Society. As John un-

derstood the need to disseminate information through an academic journal, he also very much understood that preserving the archaeological record is only possible if the public is educated to its significance and fragile nature. As a result, John taught a course in introductory archaeology at Borah High School. In addition, John and Florence supported graduate student projects, providing financial support and an occasional side of beef. In the late 1970's and through the early years of their retirement they often visited and worked on local archaeological projects. It was my good fortune to have had their labors and good company on many of my Owyhee projects. During those visits I was often reminded of the commitment and roles played by avocational archaeologists.

John and Florence, who were ardent supporters of the archaeology program at Boise State University, gifted to the university an extensive archaeological collection and established the John and Florence Schaertl Archaeology Scholarship, awarded each year to a Boise State University student pursuing a career in archaeology.

Though John's passing marks the near end of an era in Idaho archaeology, the fruit of his efforts in educating the public to the need for preserving Idaho's cultural heritage, will continue for a very long time.

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