

Abstracts Of Papers

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The University of North Carolina
at Chapel Hill

1964

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ABSTRACTS OF PAPERS

Presented at the
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edited by
Joffre L. Coe

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arranged alphabetically by author

Abbott, Ellen

The Dios of Cerro de Moctehuma, Zacatecas, Mexico

In 1962 a Southern Illinois University field party discovered a stone dios statue buried deep in the fill of an altar in the principal court of the site of Cerro de Moctehuma in western Zacatecas. The circumstances of the find suggest a considerable ceremonial importance for the idol, which dates either to the Canutillo Phase of the Chalchihuites Culture with a date of around A.D. 400-500, or to the subsequent Vesuvio Phase with a possible date of circa A.D. 700-800. The idol may represent a deity comparable to the God of Fire (of the World Below) of the Huichol, and its presence beneath the altar of the central court may be analagous to the storage of Huichol idols in a pit beneath the central fire of the God House - or of the Sipapua of the Southwest.

Southern Illinois University

Agogino, George A. and Irwin Rovner

Blackwater Draw: Paleo Indian Excavations by
Eastern New Mexico University, 1963-1964

The Blackwater Draw Paleo-Indian site has been under constant excavation since June, 1963. The work, of a salvage nature, since commercial operations are constantly destroying the remaining sections of the site, has revealed over 1200 artifacts in the past nine months. This material has been from the Portales (7000-9000), Folsom (10,000-10,500) and Llano (11,000-12,000) horizons. The fauna includes Bison antiquus, camel, horse, and mammoth from the lowest level and extinct bison forms from the Folsom and Portales horizons. The paper will briefly cover Eastern New Mexico University's role in this research.

Eastern New Mexico University

Alegria, Ricardo E.

On Puerto Rican Archaeology

Historical sources corroborated by archaeological research demonstrate that the Antillena area was inhabited by three cultural traditions. Puerto Rico, because of its intermediate position between the Greater Antilles and the Lesser Antilles, is of great importance in determining the chronology and distribution of the West Indies aboriginal cultures. Recent Puerto Rican carbon 14 dates demonstrate that the island was first populated by a preceramic people who arrived before the Christian Era. The relation of these aborigines with other preceramic cultures of Venezuela has been postulated although neither the chronology of the sites nor their distribution correspond. Other carbon 14 dates from Puerto Rico establish a clear relationship of the different pottery styles of the island with those of the Lesser Antilles and Venezuela.

Instituto de Cultura
Puertorriquena

Baby, Raymond S. and James A. Brown

Re-examination of the Mound City Group

The re-examination of the Mound City Group carried out by the Ohio State Museum in co-operation with the National Park Service during 1963 has revealed considerable information on the prehistoric activities associated with the mound group. Beneath two of the mounds that were investigated new evidence was found of house structures that underlay them as well as their associated burials and structural features. A new borrow pit was excavated that now completes the arrangement of pits outside each of the corners. Work carried out along the site of the original embankment clearly indicated that (1) the area had been used as a prehistoric dump, and (2) the perimeter had been used to inter burials in the flesh. The presence of dumps in otherwise sterile areas provides evidence for an important aspect of Hopewellian behavior. The basis for a stratigraphic sequence is provided by the materials in and beneath the embankment and those in the fill of the adjoining borrow pit.

Ohio State Museum and University of Oklahoma

Baby, Raymond (see Potter, Martha A.)

Baerreis, David A. (see Bryson, Reid A.)

Baker, Galen R.

Plains-Pueblo Archaeology in the Park Plateau

The use of northeastern New Mexico and southeastern Colorado is recognized in a general way as a center of Apache, Ute, Comanche, and Kiowa activities in the historic period. Even less is known with regards to the materials and information available on the prehistoric period. The purpose of this paper is to present a chronology of the now known occupational sequence, summarize the recovered materials of the Park Plateau, discuss the problem of the relationships of this material with that of the Southwest and Plains provinces, and to present the prevailing archaeological evidence dealing with the early historic period. Recent salvage archaeology undertaken by the National Park Service in cooperation with Trinidad State Junior College along the Upper Purgatoire River in the northern part of the Park Plateau has uncovered new information that significantly adds to and alters our understanding of the prehistory of this area. Several possibilities exist in regard to the origin, development, and disappearance of the prehistoric cultures that inhabited the area. Although the topography and environment are essentially the same from north to south, it is noted that there are a number of characteristics which differentiate the occupations of the northern part of the Plateau from that of the southern part. The material in this paper dealing with the historic period includes the archaeological evidence of Apache and Ute occupations believed to tie in with information presented by Morris F. Taylor in the following paper.

Trinidad State Junior College

Barka, Norman F.

Historic Sites Archaeology in New Brunswick, Canada: The Excavation of Fort La Tour (1631-1645) and La Coupe Drydock (17th Century)

Under the auspices of the Department of Northern Affairs and National Resources of Canada, two French historic sites were investigated in eastern New Brunswick

in 1963. Fort La Tour was a French trading post partially surrounded by a palisade and bastions. Remains of buildings, fireplaces, and a unique drainage system of cobblestones were found. Thousands of artifacts, of French, English, Dutch, Chinese, German, and Swedish derivation, include pottery, hardware, ornaments, and glass. La Coupe Drydock was a quadrangular shaped earthworks with water gates or aboideaux at opposite ends to regulate tidal river flow. Excavation revealed the construction of the aboideaux to be of clay and brush, with probable wooden gates.

Harvard University

Bastian, Tyler

Problems of Determining Aboriginal Sources of Native Copper in Eastern North America

Accumulated information suggests that it may be possible to link native copper artifacts with specific deposits of copper. The principal approach to this problem has been by analyses for trace elements, but the available studies are either so superficial or based on such a small number of samples that their significance is difficult to appraise. Recent interpretations range from rejection of the technique to claims of partial success. The present need is for an intensive and systematic investigation of numerous samples of native copper from each of the various deposits by competent specialized investigators.

Museum of the Great Plains

Bettarel, Robert (see Griffin, James B.)

Blasingham, Emily J.

A Woodland Manifestation in North Central Kansas

In 1962, during the course of salvage operation in the Norton Reservoir on Prairie Dog Creek, the University of Nebraska Field School excavated a portion of a Woodland site (14Nt11). In comparison to adjacent Woodland sites, a large number of stone, bone, and pottery artifacts were recovered. Some of the stone tools are identical to those found in Woodland sites; others are basically like those found in Aksarben sites. The pottery is essentially Woodland in design. The few kernels of corn which were recovered from three distinct,

undisturbed locales within the site suggest that 14Nt11 was occupied during or after the Middle Woodland period in Kansas.

Loyola University

Bordaz, Jacques

Post-Classic Ceramic Kilns at Penitas, Coastal Nayarit, Mexico

This paper will describe three ceramic kilns dated ca. 1200 A.D. found with their associated wasters by the author in 1956 as a member of a UCLA expedition to Coastal Nayarit. The kilns are horizontal pit kilns measuring about 5' by 3' by 2' and divided in two chambers. The large quantity of pottery wasters excavated (spalls, etc.) indicated a prolonged use of the kiln structures. Craft specialization indicated by these finds will be discussed.

New York University

Brown, James A. (see Baby, Raymond)

Bryson, Reid A. and David A. Baerreis

Paleoclimatology and the Mill Creek Culture of Northwest Iowa

During the summer of 1963, limited excavations were conducted in five Mill Creek middens (13OB2, 3 and 4; 13OK21 and 13PM4). Soil samples were collected for pollen recovery, soil profiles were checked, and collections of faunal and cultural remains were made. Particular emphasis was placed on collection of samples for radiocarbon dating from all occupational levels of the sites. Precise placement in time was essential since the study was designed to test whether a multidisciplinary approach would reveal direct evidence of the impact of the "Little Climatic Optimum" spanned by the sites. Results of the dating program and climatic implications of the study are discussed.

University of Wisconsin

Bullen, Ripley P.

The Archaeology of Grenada

Tests in Grenada, supported by the American Philosophical Society, delineated three major ceramic periods. The first, 0-700 A.D., was a typical extension of the Salaloid-Barrancoid tradition of Venezuela. The second was represented by burnished, red-painted pottery with rim points and horns associated with black and red painted casuelas. A thick, crude ware, which frequently exhibited deeply scratched surfaces, characterized the third. A late phase with finger indented rims was associated with historic materials. These ceramic traditions may be correlated with the pre-Arawak, Arawak, and Carib Indians. Pottery of the second is found, I believe, in Cuba and Jamaica but that of the third not, so far, beyond Antigua. This agrees with the historic distribution of the Arawaks and Caribs.

Florida State Museum

Campbell, John M. and Anne Shinkwin

Early Man in the Central Brooks Range, Alaska:
The Tuktu-Naiyuk Site

The locality of the previously described Tuktu at Anaktuvuk Pass has recently yielded lithic remains which imply the presence there of at least one other major archeological component, the "Naiyuk Complex." Preliminary typological comparisons led the senior author to believe that Naiyuk predates the Tuktu Complex. The ages of Tuktu and Naiyuk are now discussed from the evidence of radiocarbon, obsidian, and seriation dating techniques.

George Washington University

Campbell, T. N.

Initial Survey of the Padre Island National
Seashore Area

Padre Island, a long (110 miles), narrow, barrier island that parallels the south Texas coast, was not fully formed until 2000 B.C. (geologic studies and radiocarbon-dated marine shell). Thereafter, it was

intermittently occupied by small groups from the mainland, the main attraction being marine food resources. Campsites appear to be abundant on the island but today are found only in certain active dune areas. All known sites have been repeatedly exposed by wind deflation and reburied by shifting dunes. Three stages of occupation can be recognized: late Archaic (pre-ceramic), late prehistoric (Rockport culture, ceramic), and historic (Spanish colonial and recent ranching operations).

University of Texas

Carter, George F. and W. G. Harper

Identification of Recent and Wisconsin Age Soils
at La Jolla, California

Since soils record climates, an alluvial sequence should, under favorable circumstances, record modern soil weathering conditions at the surface and past weathering conditions at some depth. Such a sequence seemingly recording both Recent and Wisconsin conditions in Southern California will be reported. The soil column has been C-14 dated. The associated archaeology is La Jolla culture.

Johns Hopkins University

Carter, W. K.

Old Bering Sea Types at Point Barrow

Old Bering Sea type artifacts have been reported previously from the Point Barrow area, but provenance or identification have frequently been in question. In materials excavated by Peabody Museum of Harvard are items that could fit into OBS assemblages including harpoon heads that fit OBS typologies and two, from the Birnirk site, with typical and unmistakable decorations (OBS 3 and Okvik). Contrary to opinion, Birnirk is not exclusively a single period site. At least four culture phases are represented. Unfortunately some subsidiary hypothesis must be advanced to account for the OBS items coming from refuse heaps above levels of later periods.

Tufts University

Clausen, Carl J.

Devils Den

At Devils Den, a solution feature in Levy County, north central Florida, quantities of faunal remains, including extinct varieties, have been found in association with human cultural and skeletal material. Deposits containing bones and artifacts are located in underwater caves leading horizontally from the main solution cavern at depths varying from five to 90 feet. Material includes skeletal portions of several dolichocephalic individuals, bone awls, pins, multiple barbed bone points, and large stemmed projectile points. Extinct fauna are shortfaced bear, ground sloth, dire wolf and giant land turtle. Fluorine tests indicate some human skeletal and extinct faunal remains are contemporaneous.

University of Florida

Cleland, Charles (see Griffin, James B.)

Cleland, Charles E.

Cultural Variation in the Selection of Animal Foods: An Ethnozoological Study

A comparison of the animal remains from two archaeological sites near the Straits of Mackinac in northern Michigan provides an excellent illustration of the effect of culture on the selection of animal foods. The faunal remains from the Juntunen site are typical of the latest aboriginal adaptation in the Upper Great Lakes region. This adaptation is contrasted with those of the French and later the British who occupied nearby Ft. Michilimackinac. In the absence of marked ecological change through time, differences in the selection of food animals are related to various technological socio-political and ideological differences in these three cultures.

University of Michigan

Clune, Francis J., Jr.

How to Build A . . . : A Comparison of Archaeology and Modern Methods

Data are given dealing with the cubic yardage of various structures found in Mesoamerica and in the Southeast (Pyramid of the Sun, Pyramid of the Moon, a ballcourt at Amapa, Nay., Mex. and Mound A at Etowah, Georgia). Different formula are given to estimate the man days of labor necessary to build these structures. These data are then compared with figures that are based on modern labor union figures for the different building trades that would be involved. The purpose of this comparison is to allow a slightly more exact figure for man-power estimates than has been made previously.

University of Georgia

Coe, Joffre L.

The Archaic of the Central Atlantic States

The concept of an "archaic" level of cultural development in the southeast has evolved rapidly during the last decade. Only a few years ago there was considerable reluctance to concede a preceramic period for the area. Later there was equal reluctance to accept substantial antiquity for many non-ceramic cultures that could be identified. Today, it appears that there were some "archaic" cultures that were co-existent with some paleo-indian culture in the southeast. There is no longer reasonable doubt that the concept "archaic" covers a long period of time and that it must be defined in terms of content as well as time.

University of North Carolina

Cotter, John L.

Methods and Problems of Teaching Historical Sites Archaeology

Needs for historical sites investigators and conservators and interpreters have become demands, due to the escalation of values of such sites in the minds of the American people and, by reflection, on the tax rolls. Alas, the investigators are few and of varying

competence, ranging from historians and anthropologists who have acquired archaeological competence in addition to their academic foundation to a few sheer frauds. Presently, federal, state, and local agencies are calling increasingly for competent specialists to investigate and conserve historical sites. This is also true of private investors for houses or buildings known or alleged to be of historical or architectural merit. Neither departments of history or anthropology in American universities have hastened to provide course work aimed at training those who wish to specialize in historical sites investigations as archaeologists. The first United States university to do so was the University of Pennsylvania, and the course was offered in the Graduate School of Arts and Sciences by the Department of American Civilization. Two other universities now have related courses. Problems related to this speciality are being defined; meanwhile the student is largely on his own.

National Park Service

Culbert, T. Patrick

The Ceramic Sequence at Tikal, Guatemala

The basic outline of the Tikal ceramic sequence has been completed. The sequence consists of 12 ceramic complexes; 5 Preclassic, 2 Early Classic, 3 Late Classic, and 2 Postclassic. Since many of the Tikal complexes show great similarity to the already well known Uaxactun sequence, this paper will stress parts of the sequence in which the Tikal data adds new information which was not available at Uaxactun. Particular emphasis will be given to the subdivisions of the Preclassic, and to the nature of the ceramic transitions between Preclassic and Early Classic and between Early Classic and Late Classic.

Southern Illinois University

Daugherty, Richard D.

Plateau Prehistory: The Lower Snake River Region

An extensive program of archaeological and geochronological research in this region has led to the development of a cultural sequence extending from early postglacial times to the present and to an understanding

of the relationships of this cultural sequence to the postglacial environments. The sequence and relationships will be outlined and discussed.

Washington State University

Davis, Emma Lou

Anasazi Mobility and Mesa Verde "Migrations"

Three summers of field reconnaissance under the auspices of Wetherill Mesa Laboratory have brought in new information on the instability of primitive agricultural communities in the Southwest. (1) Continual, small-scale population shifts were characteristic of Anasazi culture. (2) There is both ethnographic and archaeological evidence for this semi-sedentary way of life. (3) At times the drifts assumed a directionality and magnitude which merit the term "migrations." (4) Ethnographic and archaeological data suggest that people moved about as rather small groups: by extended families or clans rather than as villages in a solid phalanx. (5) Using pottery styles as clues, it is possible to track movements of Tusayan people into the San Juan area and of San Juan peoples toward the south and the Rio Grande. (6) "Chacoan" and "Mesa Verde" are styles rather than places, and the latter succeeded the former in a host of different villages. (7) The constant mobility kept Anasazi culture relatively homogenized. (8) Most moves were set in motion by pressures, not catastrophes.

Mesa Verde National Park

Davis, E. Mott

The Archaic Stage on the Plains

The change from Paleo-Indian to Archaic in the Plains may have been primarily a reaction to environmental change. The change from Archaic to post-Archaic was much more significant and was not necessarily tied to environmental change. The Plains Archaic can best be discussed simply as a particular part of the sequence of Plains cultural history. Its significance can most clearly be seen when viewed as part of North American cultural history as a whole.

University of Texas

Davis, E. Mott

Spadework for History: Salvage Archaeology in United States Reservoirs (16 mm. films, color, sound)

A series of films were produced by the University of Texas on a grant from the National Science Foundation, with the cooperation of the National Educational Television and Radio Center. Prepared under the technical direction and narration of E. Mott Davis, Department of Anthropology, University of Texas.

The films present archaeology as part of 20th Century life, through the example of reservoir salvage. North American and regional pre-history is reviewed briefly and, through field sequences, the viewer is acquainted with problems and techniques.

The six films constitute a series, in which each film is different from the others and each is complete in itself. No. 1 is a general statement, Nos. 2-5 are based on work in the different archaeological regions, and No. 6 looks at Texas as an exemplification of the national situation. Each film is $\frac{1}{2}$ hr. long, in color.

Titles and major emphases:

- No. 1 Salvaging American Prehistory (general statement on archaeology and salvage)
- No. 2 The Woodlands (organization of research; reconnaissance)
- No. 3 The Plains (excavation strategy)
- No. 4 The desert (diversity of approaches, interdisciplinary work)
- No. 5 Plateau and Pacific (stratigraphy, working out area sequence)
- No. 6 Salvaging Texas Prehistory (general statement, growing from story of one site)

Dean, James C.

The Use of Native Mesoamerican Medicinal Documents for the Historical Reconstruction of Therapeutics

For the most part, the documentary materials concerning medicinal plants and other divinational practices have been neglected or have not been useful to the students of this newer discipline--that of Prehistoric Medicine.

Many pages of most every early manuscript dealing with Mesoamerica are devoted to the symptoms and cures of diseases. Some entire manuscripts deal with astronomy, chronology, medicine, or a combination of these. Until now, chronology has been the principal field of research and study. For the past several years, more interest has been expressed in this field of medicine. From the documentary sources and the usage of certain symbolism (i.e. monumental inscriptions, figurines, and associated paraphernalia) it is possible to trace some of the medicinal remedies (recipes) and their plant-sources back through the history of the early cultures of Mesoamerica. Thus the type of treatment for a given disease or illness will show a temporal and spacial distribution. It will be shown through examples how this material can be used for reconstructing the cultural usages of therapeutics.

Salt Lake City, Utah

Deetz, James and Edwin Dethlefsen

Death's Heads, Cherubs, and Willow Trees: Experimental Archaeology in Colonial Cemeteries

Seventeenth and eighteenth century gravestones in Massachusetts are decorated with a traditional set of designs which have distinctive spatial and temporal limits. By treating them as archaeological phenomena, one can demonstrate and test methods of inferring diffusion, design evolution, and relationships between a folk art tradition and the culture which produced it. Early popularity of skulls reflects Puritan attitudes toward death, while the later cherubs and willow and urn motifs indicate the breakdown of these values. Although cherubs appear earliest among an innovating urban class in Boston-Cambridge, they remain minor in this central area, but are rapidly adopted in outlying districts, further removed from the center of influence. Imperfect reproduction of certain designs give rise to distinctive local styles of other areas.

University of California
and Harvard University

DeJarnette, David L.

Bluff Shelter Excavations in Northern Alabama

During the past three years the University of Alabama has cooperated with the Alabama Archaeological Society and the Archaeological Research Association of Alabama, Inc. in the survey and excavation of rock shelters along the rim of the Tennessee Valley in northern Alabama. The first of these, the Stanfield-Worley Shelter, was excavated in 1961 and reported on in the Journal of Alabama Archaeology, Volume VIII, Nos. 1 and 2, 1962. A second season at this shelter was completed in 1964 during which a closer tie between projectile point styles and known pottery sequences was attempted. The second of the bluff shelters, Asbury Rock House, located in Marshall County, was excavated during 1962 and 1963. This site represents the first well documented report for the stratigraphic placement of the Cumberland point. Four fragments with well defined flutes have been tentatively identified as Cumberland. Although natural stratigraphy could not be discerned in the excavations, the fragments were found in the deepest levels (32 to 44 inches). Present also in these levels were two Quads, three Daltons, uniface tools, and several projectile points considered to be Early Archaic.

University of Alabama

Dethlefsen, Edwin (see Deetz, James)

Dort, Wakefield, Jr.

Geology of Indian Head Cave, Birch Creek Valley, Idaho

This cave, at the head of the bahada in the upper part of broad Birch Creek Valley, is in fractured, folded limestone of the Beaverhead Mountains. Its height averages 7 feet; its floor, about 33 feet square, rises gently inward. Before excavation by Hind Sadek in 1961-62, a fill of angular limestone rubble and tens of thousands of unburned bone fragments sealed off the cave at the front and nearly filled the rear. Protruding joint blocks covered by fill are smooth and sharply angular; those above the fill have rounded edges and surfaces roughened by secondary calcium carbonate precipitated from moisture clinging to exposed rock surfaces after the fill accumulated and

sealed the cave. This water, not present when the cave was opened, apparently collected during a pluvial episode. It is estimated that the cool, moist Medithermal interval lasted from 2000 to 500 B.P. in this arid part of Idaho, a period perhaps too recent, too brief, and of insufficient intensity to permit solution of joint-block edges to the extent observed. Previously, sufficient moisture would have been present during the Lateglacial and Early Postglacial (Anathermal) periods ending about 9500 B.P. To allow time for solutional activity in the restricted microclimate, the cave must have been sealed two or more millenia earlier. This reasoning suggests that a radiocarbon date of 10,000 B.P. for charcoal near the middle of the fill section is too young, an inference supported by the suite of extinct mammals and birds represented by bones throughout the fill.

University of Kansas

Dumond, Don E.

Some Implications for Archaeology of Eskaleut Linguistic Classifications

The distributions of Eskaleut and of languages and dialects of its Eskimoan division are considered together with relative time-depths implied by the linguistic classification. Some archaeological horizons from the area of present Eskimo speech are examined, and an attempt is made to tentatively identify archaeological manifestations of social groups ancestral to speakers of modern Inupik, Yupik, Eskimoan, and Eskaleut.

University of Oregon

Epstein, Jeremiah F.

A Long Stratified Sequence from Nuevo Leon, Mexico

During the period between October 1 and December 15th, 1963, excavations were carried out in a rock shelter approximately 30 kilometers west of Linares, Nuevo Leon, Mexico. Because the deposit was only five feet thick and showed no natural zoning, and because the artifact density was especially high, the main excavation block was dug in artificial levels of 3

inches. The deposit contained what appears to be an unbroken series of occupations from terminal Pleistocene times to the 16th century. Although the projectile point sequence obtained largely duplicates that worked out by MacNeish for Tamaulipas, the remainder of the chipped stone assemblage is quite different.

University of Texas

Eyman, Charles (see Griffin, James B.)

Fairbanks, Charles H.

A Feldspar Inlaid Ceramic Type from Spanish Colonial Sites

A type of Mesoamerican pottery of general earthenware characteristics has been known as part of the village pottery complex of modern Mesoamerica. The earthenware is characterized by inlays of small tessera of white feldspar. Additional decoration may involve rouletting, stamping, and modeling. Shapes involve plates, pitchers, and urn forms. The same ware is now known to have been made at a Spanish colonial kiln in Panama Vieja, Republic of Panama where sherds were found in close association with the kiln. These sherds are believed to date from the 17th century. Highly similar sherds have been observed at the site of Ft. Jesus, Mombasa where they are presumed to relate to the Portuguese occupation. Additional information is needed on the distribution of this distinctive type.

University of Florida

Fiske, Timothy

Two Manitoba Burial Mounds

The excavation of two burial mounds along the Red River at Lockport, Manitoba was carried out during the summer of 1963 as part of a larger salvage archaeological project. Both mounds produced considerable material in spite of previous disturbances from excavators. The undisturbed burials recovered show different burial modes, some evidences of skeletal pathology, and a certain variety of associated artifacts. Cultural material from the mound fill indicates the presence of a habitation site adjacent to

the mounds. The mounds are most likely Late Woodland manifestations.

University of Manitoba

Fitting, James E.

The Younge Tradition: A Late Woodland Sequence in Southeastern Michigan

A distinctive Late Woodland cultural tradition was identified in southeastern Michigan at the Younge site, excavated and reported by Dr. Emerson F. Greenman in 1937. Recent analysis of materials from the Riviere au Vase, Fuller and Verchave sites in Macomb County, Michigan and the Fort Wayne Mound in Wayne County, Michigan have demonstrated a developmental sequence within this tradition. Four successive phases of the Younge Tradition have been isolated in the time period between approximately A.D. 800 and A.D. 1500.

Wayne State University

Fowler, Melvin L.

The Archaic Cultures of the Midwest

The area discussed centers around the middle Mississippi River Valley and the various tributaries. The cultural materials which underlay Archaic in the Midwest are Clovis. There are no data to present, with the possible exception of Graham Cave that shows Archaic developing out of Clovis. Archaic cultures are clearly established by 7000 B.C. and, therefore, are contemporary with Folsom in the southern Plains, Plainview in the northern Plains, and Plano in the Prairie. Archaic materials are associated with Plano-like points in the Midwest, namely Dalton in southern Illinois and Plano or Plainview like in central Illinois. These are part of the Archaic assemblage but may represent technological carry-overs of the Clovis tradition. The development of the Archaic in the Midwest is one of gradual ecological adaptation to specific environmental zones. The seasonal cycle of food getting was developed and well established by the Archaic peoples. Late in Archaic sequences there is evidence that the cultivation of local plants, such as the sunflower, augmented the subsistence base. Several regional traditions or cultures are recognizable in the Archaic of the Midwest.

This is probably a direct reflection of the localized food getting techniques and the seasonal cycle which localized the territoriality of the Archaic peoples and limited the contacts they had with other groups. The Archaic of the Midwest is the basic cultural expression upon which the elaborate ceremonial complex of the tomb builder cult was added.

University of Southern
Illinois Museum

Giddings, J. L.

Eskimo-Indian Contacts in 30-Layer Stratigraphy

The spacious Onion Portage site on the forested Kobuk River in Arctic Alaska has, in sharply defined stratigraphy, a long series of cultural phases, alternating at irregular intervals between Eskimo-related coastal forms and more Indian-like, as yet unnamed, forms, not yet found on the coast. From the top, the better-known coastal phases represented here are Tigara (or Kotzebue), Thule, Norton, and Denbigh Flint. The Denbigh layer may represent the earliest of Eskimo-like cultures in America. Below it are at least fifteen culture layers, some containing notched points, but none containing microblades or burins. Still deeper levels are not yet fully explored. They appear to reach back into glacial times.

Brown University

Giddings, J. L.

Beach Ridge Archaeology and Vertical Stratigraphy in Alaska (50 min. film, 16 mm., color, silent)

Several beach ridge series, where sites occur in time order, are shown from the air and on the ground, spaced around 250 miles of the Chukchi Sea from Bering Strait to Cape Krusenstern. Sites and excavations are shown of these cultural phases: Recent, Old Kotzebue, Western Thule, Ipiutak, Old Whaling, Denbigh, and Palisades. The film ends with the newly discovered vertical stratigraphy of the Onion Portage site. The movie begins at Bering Strait, with views of Wales Village and the Diomed Islands; moves to Norton and Denbigh sites on early stranded beaches; moves via Choris Peninsula, Kotzebue, and Shesualek to Cape

Krusenstern, where most of the film then concentrates on excavations. A house pit is located and dug; a two-mile walk is taken across the increasingly tundra-covered ridges to the lagoon; the Palisades site is approached, first by boat and then by climbing, and the elevated site itself is examined; camp life and the arrival of a reindeer herd are examined; a burned Ipiutak house divulges skeletons; and the Battle Rock site is visited. Finally, the film moves inland to the forested Kobuk River, where, on a high terrace, are found notched points and microblades and then farther up river to the Onion Portage site where in some thirty layers, shown in detail, Denbigh flints occur halfway down, with a wide range of notched-point layers below that, and, lower still, what appear to be glacial or immediately post-glacial deposits.

Brown University

Grange, Roger T., Jr.

Spring Creek: An Archaic Site in Western Nebraska

25 FT 31 was located at the confluence of Spring Creek and Red Willow Creek in Frontier County north of McCook, Nebraska. The site was excavated in 1961 during reservoir salvage work. Projectile points recovered are very similar to the side notched points from the Logan Creek site in eastern Nebraska. The Plains Archaic Component at 25 FT 31 has a carbon 14 date of 5,860 plus or minus 160 B.P. (M 1364).

Nebraska State Historical
Society

Greengo, Robert E.

The Wells Archaeological Salvage Project

During the summer of 1963 a four year archaeological salvage project was initiated by the University of Washington in the Wells Hydroelectric Reservoir on the Columbia River. Besides a number of documented aboriginal sites this area also contains the sites of an early fur-trading post, Fort Okanogan. Excavations were begun at the Fort, as well as at aboriginal burial and house pit sites. Data recovered contributes towards redefinition of the late prehistoric and early

contact periods in this area. Analysis is expected to yield new insight into acculturative processes.

University of Washington

Griffin, James B., Chairman, with Robert Bettarel, Charles Cleland, Charles Eyman, Allan L. McPherron, and Henry T. Wright.

The Culture and Ecology of a Prehistoric Hunting and Gathering Group in the Upper Great Lakes

The Juntunen Site is located on the western tip of Bois Blanc Island which is in Lake Huron on the east side of the Straits of Mackinac. The field and laboratory methods used in the study of the geology of the site were a compromise between small-scale archaeological techniques and large scale geological techniques. A research design, constructed to avoid the problems of this compromise, will be discussed.

The morphology of the site during each occupation, the vegetation cover during each occupation, and the processes responsible for these features (specifically the regressions and transgressions of Lake Huron) have been reconstructed. The phenomena will be discussed in relation to cultural developments on the site.

The analysis of the animal remains represents the only intensive quantitative and qualitative analyses of the food remains from an aboriginal fishing site in the Great Lakes area. The Juntunen site represents recurrent spring to late fall occupations of people who were participating in a subsistence cycle which has been called the "Inland Shore Fishing Complex." The important food items during this season were fish, especially whitefish and large sturgeon, which were taken with harpoons and perhaps gill nets.

The ecological position of the Juntunen site between two major natural provinces is of particular interest in view of the fact that climatic fluctuations should be reflected in the fauna of the site. The fauna of the earliest major occupation (835 A.D.) and that of the latest occupation (1200-1300 A.D.), shows strong affinities with the boreal forest to the north while the middle occupation (900-1000 A.D.) contains species typically associated with the deciduous forest farther south.

The identifiable plant remains from the site include corn, a variety of cherry pits, chenopod seeds, blackberry, raspberry, blueberry, grape, elderberry, beech-nut, acorns, Canada plum, sumac, and pepper-root tubers. The plant remains correspond to a period of occupation of the site from May to October. The maize is probably an early variety of the Eastern Complex. The earliest appearance of maize at the site is about A.D. 1000 and this is one of the most northern archaeological examples of maize.

The earliest occupation shows similarities to other Middle Woodland groups from the Saugeen focus of Ontario to the North Bay I complex on the Door Peninsula of Wisconsin, to Laurel in Minnesota and Ontario and to Point Peninsula to the east. There are apparently a series of occupations during Middle Woodland times. They represent some of the first evidences we have for the intensive utilization of aquatic resources in the Upper Great Lakes. A radiocarbon date from a grave containing several flexed burials and pottery, places one of the Middle Woodland occupations at A.D. 63±130 (M-1392).

The major part of the site is Late Woodland and has a stone industry that is characterized by heavy reliance on non-local cherts. Besides small triangular points, often produced from free flakes solely by edge trimming and thumbnail scrapers, a "small-tool complex" is attested, particularly for the later occupations, with a distinctive technique for production of artifacts, mostly previously unreported, but also including classic bladelets. Groundstone tools are virtually absent.

Copper artifacts made at the site consist largely of small awls. Artifacts and copper debris indicate raw materials to have been obtained in form of small discrete pieces, suggesting perhaps a change in source of supply from that of the "Old Copper" industry. Copper is absent from the earliest occupations and is heaviest in the later ones.

Ceramics range from Lake Michigan Ware corded and punctated vessels in early periods, with stylistic similarities closest to Wisconsin, through Iroquois-like collared, castellated, push-pull decorated vessels in latest occupations, indicating a west to east shift in style-area affiliations.

Settlement and community patterns: a long-house was built during a late occupation period. Settlement cycle is inferred to be essentially that known for the historic Ojibwa. Physically the population is close to that of the historical Algonkians of the area.

The site is also of importance because it is on the border of several biotic and geographic zones, and is sensitive to changes of minor nature in exploitative and economic systems. It is located at a strategic point between the Michigan and Huron basins and between the upper and lower peninsulas of Michigan.

University of Michigan

Griffin, James B.

The New Two-Creeks Radiocarbon Dates and Their Archaeological Implications

The new Two-Creeks Radiocarbon dates are about 1000 years earlier than that of many interpretations of their age. They are in phase with new estimates of the age of the Champlain Sea, of the initial stage of James Bay and demand a new estimate of the age of the Cochrane. The correlation of projectile point styles with Great Lakes geochronology suggests that the shift from fluted points to Plano forms took place earlier in the Great Lakes than in the High Plains.

University of Michigan

Griffin, John W.

The Archaic Sequence in the Ocmulgee Bottoms

Salvage excavations conducted in the bottomlands of Ocmulgee National Monument, Georgia, in advance of construction of an Interstate Highway, disclosed a projectile point sequence ranging from Early Archaic to Savannah River, as well as all later and previously known periods. The sequence is associated with stratigraphically defined soil zones established by geologists working on the project, and correlates well with the dated sequences in the nearby states of North Carolina and Alabama. The occupation of Ocmulgee, as now known, stretches virtually uninterrupted from Paleo-Indian through Historic Creek times.

National Park Service

Haag, William G.

Sequence of Pottery Types in Some of the Lesser Antilles

Pottery types are demonstrably useful archaeological tools in the Lesser Antilles. The sequence of types established in select excavations in St. Lucia and in Martinique confirms the sequence in Trinidad and northern South America. Several horizon markers are so uniform throughout their distribution from St. Lucia to Guadeloupe as to suggest their being trade objects. These are the early "types" such as White on Red, Broad-Line Incised, Incised Polychrome, and Zoned Crosshatch. An additional type may be delineated based on conventionalized faces with coffee bean eyes. Another is a distinctive rim treatment wherein the lip area is regularly punctated with finger depressions. The seriation of these uniform and easily recognized types enables the reconstruction of a site occupation sequence applicable to all the Lesser Antilles.

Louisiana State University

Hadleigh-West, Frederick

An Apparent Symmetry in Pre-Neolithic Developments: Western Europe and Eastern United States

Recent work in Europe and the eastern United States has so altered pre-Neolithic chronologies as to indicate the possibility of several interesting correlations. Late Pleistocene hunting in both regions gave way to early Holocene hunting-fishing-foraging at approximately the same time. It is suggested that this transformation was in both instances largely ecological in nature. Whereas previously ways of life could be largely geared to animals of a few species, with post-glacial environmental succession it became necessary to diversify. Thus, similar environmental changes of late Pleistocene-Early Recent on both subcontinents appear to have induced broadly similar cultural adaptations.

University of Alaska

Harper, W. G. (see Carter, George F.)

Howard, Robert R.

Jamaican Archaeology

Recent investigations still yield no sign of pre-pottery or of Arawak occupation of Jamaica before early Period III in the Rouse chronology. Jamaican sites indicate a characteristically Arawakan culture lacking, however, the ceremonial elaboration developed in Haiti. Jamaican pottery shows relatively little change through time and only minor local variation. Two distinct sub-types are present: (1) Little River from early Period III and (2) Montego Bay whose position in time is still not clear. Closest stylistic affiliation is with Bani of Cuba and Meillac of Haiti. The late period Carrier style of Haiti did not diffuse to Jamaica. Certain distinctive burial practices and features of village construction are evidenced by recent excavations at White Marl and other south coast sites.

University of Wisconsin-
Milwaukee

Huntington, Frank (see Lipe, William D.)

Hurt, Wesley R.

Cultural Relationships between Lagoa Santa and the Sambaquis of Southern Brazil

A comparison of the artifacts from the oldest complexes of the caves of Lagoa Santa in south central Brazil with those from the Sambaquis (shell-mounds) of the coast of Parana reveals many typological similarities. Because all the known evidence points to greater age of oldest artifacts from Lagoa Santa, approximately 10,000 years ago, it is possible that they are the ancestral forms of those that appeared in the shellmounds, the earliest of which has been dated at 7000 years ago. Apparently what occurred is that hunting peoples in the interior gradually moved down to the coast during the onset of the Post-glacial thermal maximum to take advantage of a postulated increase in shellfish. Judging by the type of artifacts these latter shellfish collectors never gave up completely their hunting activities. In fact they may

have remained on the coast only for a certain season of the year and at other times returned to the highlands for hunting. Major artifact types in common included stemmed projectile points made of stone, split cannon bone projectile points, semi-polished and polished axes and celts, pitted hammerstones, and percussion-flaked scrapers and choppers.

Indiana University

Huscher, Harold A.

The Standing Boy Flint Industry: An Early Archaic Manifestation on the Chattahoochee River in Alabama and Georgia

Edward V. McMichael and James H. Kellar (1959 Archaeological Salvage in the Oliver Basin) described the Standing Boy Flint Industry, an Early Archaic artifact assemblage from a site above Columbus, Georgia, including plano-convex knives, scrapers and flake scrapers, and small triangular alternate-bevel points ("spinners"). Artifacts characteristically are made of a flint now leached to a completely chalky form, as originally described by A. R. Kelly from the Macon Plateau. Additional sites investigated by River Basin Surveys (1958-1963) along 100 miles of the Chattahoochee River bottoms, confirm the importance of the Standing Boy complex as a consistent Early Archaic phenomenon, but gradational stratigraphy obscures exact delimitation of types on present information. Better separation may depend on sampling restricted camps at spring sites higher in the hills.

Smithsonian Institution

Irving, William N.

Climate and Prehistory in the Central Arctic

Culture succession in the Central Arctic may be viewed both as a sequence of peoples of different cultures and as a sequence of economic types. The former raises questions of migration; the latter raises questions of cultural adaptation. The two sequences are compatible, and together may be correlated with a developing sequence of climatic events. New paleoecologic data from southern Keewatin are adduced to

account for the movement of Birket-Smith's Eschato-Eskimo to the Arctic Coast during the past millenium. Climatic changes may have been responsible for movements of Sargag, Dorset, and Thule cultures.

University of Wisconsin

Irwin-Williams, Cynthia

Preceramic and Early Ceramic Development in
Central Mexico

On the basis of excavations at two stratified sites in the states of Hidalgo and Queretaro (Mexico), a framework for the early prehistory of Central Mexico has been established. The sequence of cultural phases defined is believed to cover the time period from ca. 7,000 to ca. 2,000 - 1,500 B.C. The character of the remains ranges from materials usually considered in the Paleo-Indian category to the transition from the preceramic to the ceramic period. Many preceramic traits are seen to be antecedent to preclassic and later developments.

American Museum of Natural
History

Johnston, Richard B.

The Archaeological Discovery of Fort Knox II at
Vincennes, Indiana

The strategic importance of the Wabash River to the French, then British and American interests in the Northwest Territory lead to the early establishment of a series of forts in the lower valley at the settlement of Vincennes. The earliest American-built fort, completed in 1788, was the first of three posts named in honor of the then Secretary of War, Henry Knox. The second Fort Knox dates from sometime after 1803 when the military garrison was transferred to a site about two miles north of Vincennes only to be returned to town ten years later under the pressure of Indian hostilities on the frontier around the time of the Battle of Tippecanoe and the onset of the War of 1812. In July, 1963, the Indiana Historical Society undertook an exploratory excavation at what was vaguely indicated by historical documentation to be the site of Fort Knox II and succeeded in uncovering

parts of two sides of the stockade and a corner bastion. The artifacts recovered during the preliminary work, including principally brick, glass, and china fragments, were of the type in use in the early years of the 19th century. A complete excavation is now planned for what is probably the only surviving major historic fort in the state.

Angel Mounds Archaeological
Research Station

Kelley, J. Charles

Speculations on the Origin and Affiliations of
the Cultures of Northwestern Mesoamerica

Knowledge of the culture sequences in Zacatecas - Durango and Sinaloa on the northwestern frontier of Mesoamerica has now reached the stage where speculations as to Mesoamerican origins and affiliations of these cultural sequences may be undertaken with some confidence. It seems probable that the Canutillo Culture of Zacatecas-Durango derives from a Pre-Classic source and was dominant as early as A.D. 100; a similar origin may be postulated for the earliest Sinaloa cultures. A wave of Teotihuacan III ceremonialism is believed to have strongly influenced Zacatecas-Durango developments around A.D. 350; subsequent Post-Classic influences on the north-central cultures were slight, but in Sinaloa extremely direct and strong Post-Classic influences were felt after about A.D. 1000.

Southern Illinois University

Kelly, Arthur R.

Exploration at Carter's Dam Site, Murray
County, Georgia

University of Georgia explorations at Carter's dam in north Georgia have concentrated on a large mound and village tract on the Coosawattee river. Mound excavations reveal dormitory constructions on summit with special burials of priests or shamans in limestone slab burials contrasting with village burials in house floors or around walls and in large trash pits. The major occupation at this multiple site is determined to be Late Etowah, with indicated abandonment just prior to the major cult developments at Etowah type

site to the south. No evidence of horticulture was encountered in extensive village explorations in two field seasons.

University of Georgia

Keslin, Richard O.

The Use of Cinematographic Time-Lapse Technique in Archaeology

Time-lapse photography, although widely used in the biological sciences, has received little attention from archaeologists for a number of reasons. One of the significant factors in this omission is the exorbitant cost and bulk of commercially available timers. Research has resulted in the development of a timer which is inexpensive, lightweight, and which can be used to operate any 16 mm. motion picture camera (capable of singleframe exposures) for time-lapse photography. In the field this equipment can be used to: (1) Record vertical profiles as they are being exposed, with the expectation that minute differences in color and/or texture which may not be visible upon drying are recorded on color film; (2) Provide a supplemental record during the excavation of particular features; (3) Function as graphic demonstration of field techniques in the classroom.

University of Michigan

Kowta, Makoto

Old Togiak: Adaptive Changes in Bristol Bay, Alaska

An attempt is made to explain the historic characteristics of the Togiagamiuts as projections of prehistoric trends in subsistence activities as represented in the stratigraphy of the Old Togiak mound. Several trends --e.g. increasing importance of ice fishing, winter sealing, and fowling--are regarded as compensatory adjustments to a progressive inadequacy of stored winter provisions, which tended to stabilize the site as a winter encampment. Other trends such as the increased importance of fish spears at the expense of fish nets are thought to reflect a de-emphasis of the summer utilization of the bay and

increased exploitation of upstream resources.

University of California

Lane, Richard B.

Microlithofacies Analysis and Archaeological Stratigraphy

Lithofacies analysis has long been a valid and useful geological tool used for the reconstruction of past environments. Similar techniques, on a micro-scale, could also prove stratigraphically useful in archaeology. The basic concepts of microlithofacies are defined and methodology is examined in such areas as collection, analysis, and interpretation of data, paleogeographic, -climate, and -ecologic correlation, and general 'mapping' techniques. Recent evidence from the Lucy, New Mexico Early Man Site is utilized to show the methodology, techniques, and practical archaeological advantages of microlithofacies analysis. Other possible uses are postulated for this comparatively new stratigraphic method.

University of New Mexico

Larrabee, Edward McM.

Complete Excavation at the Kings Bastion
Fortress of Louisbourg, 1720-1760

The faces of the Bastion were largely excavated in 1962 under Howard and Walker. In 1963 intensive excavation was conducted on the interiors of the faces and on the flanks. Twenty-two casemates were cleared. The thirty-two ground floor rooms of the Chateau St. Louis were also excavated, but the Chapel has not yet been excavated. It is evident that when major resources are available, more information is yielded by complete excavation of related areas than by extensive sampling over broad areas. The high recovery rate of artifacts, and the cross-references between various collections of them and with the historical documents are especially valuable.

Fortress of Louisbourg
Restoration Program

Laughlin, W. S. (see McCartney, A. P.)

Lipe, William D. and Frank Huntington

Use of the Mean Location in Summarizing the Geographic Distribution of Artifact Classes

When sites and artifacts are abundant, and distributions of different artifact classes overlap markedly, mechanical difficulties arise in objectively deriving inferences from distribution patterns and in demonstrating to others the empirical bases for such inferences. Use of the mean location or "center of gravity" allows the distribution of each artifact class to be plotted as a single point on a map, thus facilitating direct comparison of numerous distributions. Electronic computation minimizes the labor involved in calculating the mean locations. Results of applying the technique to the distributions of 31 pottery classes comprising approximately 36,000 sherds from 56 sites in the Glen Canyon region of Southeastern Utah are shown.

University of Oklahoma

Long, A. G., Jr.

Photography and the Artifact

Color slides of selected Alabama projectile points as locally typed will be shown and names, with brief remarks on photographic method and types as time permits. These will be used primarily to demonstrate a simple, basic photographic technique, utilizing a minimum of equipment, and standardizing procedure to eliminate the many pitfalls associated with artifact photography. Incidentally, to introduce Alabama projectile points types, particularly Paleo and other early types, there will be a display to demonstrate stroboscopic photography, for both color and black-and-white prints.

Guntersville, Alabama

Lowe, Gareth W.

Role of the Incense-Burner Stand at Izapa During Its 2,000 Year Evolution

The incense-burner stand or incensario base appeared at Izapa during the Middle Preclassic era and continued through the Protoclassic as a basin-topped cylinder sometimes with three horns. It seems unaccompanied by other ceremonial paraphernalia and to have served a unique function; carved scenes on stone monuments illustrate this role. In the Early Classic period the burner stand was greatly proliferated and during the Late Classic both three-horn burner stands and effigy incensarios were a constant part of abundant ceremonial refuse at Izapa, apparently associated with elaborate rituals dedicated to the older Izapan water and forest dieties.

Brigham Young University

McCartney, A. P., and W. S. Laughlin

Earliest Aleutian Prehistory: The Anangula Island Core and Blade Site

Pronounced Asiatic similarities and an early date in excess of 8,000 years ago characterize the large core and blade site on Anangula Island. Radiocarbon dates and geologic analysis indicate that this marine based site, representing a single archaeological horizon, was occupied when Anangula was a part of Umnak Island and that it was terminated by volcanic ashfall. The artifact inventory of over 6,000 specimens includes micro-through macro-blades and polyhedral cores, core tablets, burins and spalls, unifacial knives, scrapers and graving tools, grinding stones, abraders, and stone vessel fragments. An extensive living floor and a pit dwelling with charcoal hearths have been exposed. We suggest that the inhabitants moved here from the Bering platform while much of the Alaska Peninsula remained under ice.

University of Wisconsin

McMichael, Edward V.

The Excavation of the Murad Mound, Kanawha County, West Virginia

In the fall of 1962 and spring of 1963, the West Virginia Geological Survey excavated the Murad Mound, east of St. Albans, West Virginia. Two log tombs were uncovered, each containing one skeleton with two copper bracelets. The only other artifacts were in the fill dirt and consisted of clay-tempered pottery, corner-notched, side-notched, and stemmed projectile points, hematite celt fragments, and a number of scraper types. It is assumed that most of these artifacts pertain to the builders of the mound. The mound apparently was constructed by mixed Adena-Armstrong Hopewell peoples and probably dates between 500 to 1 B.C. Other mound evidence in the Kanawha Valley is reviewed and it is seen that Adena is very weakly represented in undiluted form, and that most of the Charleston area mound and earthwork group is like the Murad Mound, a result of mixed Adena and Hopewell.

West Virginia Geological
Survey

McPherron, Alan L. (see Griffin, James B.)

Miller, Carl F.

Archaic Horizons Within Russell Cave, Northern Alabama

The Archaic cultural remains derived from stratified deposits in Russell Cave, Jackson County, northern Alabama, are all important in that they demonstrate not only a proliferation of projectile types as an outgrowth of earlier singular forms of the Paleo-Indian culture but these forms can be dated by means of associated radiocarbon material.

Bureau of American
Ethnology

Neuman, Robert W.

A Woodland Camp and Burial Mound Complex in Dewey County, South Dakota

Between 1960 and 1963 the Smithsonian Institution has excavated five burial mounds and portions of a campsite along the right bank of the Missouri River in the Oahe Reservoir area of north central South Dakota. The dome-shaped earthen tumuli, two at the Swift Bird and four at the Grover Hand Site, average 50 feet in diameter and 2 feet in maximum apical height. The burial complex includes a subfloor, central burial pit containing secondary human interments associated with pottery, stone implements, bone fleshers, bone and shell ornaments, worked human and animal jaws and teeth, antler objects, boatstones, hide basketry impressions, matting, and pigments. Logs supported some type of pit covering. Bison skeletons, scattered mammal bone, primary and secondary human interments are located on the mound floor. Acceptable radiocarbon dates for this burial complex range from 101 A.D. to 622 A.D. The campsite extends for 3/4 of a mile along the edge of the riverbank. The occupation level is characterized by scattered middens comprising bison, bone, small amounts of pottery, stone projectile points, end scrapers, knives, grooved mauls, and bone fleshers. Bison long bones stuck vertically into the ground present an interpretive problem.

Smithsonian Institution

Olson, Alan P. (see Rosenthal, Jane)

Phelps, David S.

Derivation of Symbols Associated with the Southeastern Ceremonial Complex

The Southeastern Ceremonial Complex, also variously known as the "Southern Cult" and "Southern Death Cult," is distinguished by a number of symbolic elements which occur together at most of the major sites such as Etowah, Moundville, and Spiro. These elements, found on pottery, shell, and copper, include the "cross," "sun circle," "swastika," "eagle warrior," "skull and bones," and various "bird forms," to mention a few. A Mesoamerican origin for the symbols is implied, but no data to verify this have been forth-

coming. Various authors have assigned the symbols to either a single or multiple complex. The paper is concerned with the derivation of the symbols from Mesoamerican cultural materials. By inspecting their occurrence in hieroglyphic texts, on pottery and in religious art and sculpture, an explicit meaning can be assigned to each. Such analysis sets the symbols in proper interpretative context in the southeastern United States.

Tulane University

Potter, Martha A. and Raymond S. Baby

Preliminary Analysis of Hopewell Influence on Ohio Late Woodland Pottery

A recent preliminary analysis of ceramics from five Late Woodland sites in central and southwestern Ohio has revealed two basic pottery types--cord-marked and plain ware. The greater percentage of the pottery is grit-tempered with the remainder being shell-tempered. The rims of these rather large vessels are everted and are either flat and squared or have added rim strips. The bases are semi-concoidal. The thin cord-marked, grit-tempered vessels with flat, squared rims are similar to the utilitarian ware associated with the Hopewell horizon. The shell-tempered vessels, some decorated with either the curvilinear or angular gilloche design, appear to be related to Fort Ancient. The greater percentage of sherds which can be placed in this latter category was found in Late Woodland sites in southwestern Ohio, indicating a late phase of Late Woodland contemporaneous with Fort Ancient.

Ohio State Museum

Prufer, Olaf H.

The McGraw Site: A Middle Woodland Site Near Chillicothe, Ross County, Ohio

The McGraw Site, excavated in 1963, is the first well-documented village site participating in the Hopewellian Interaction Sphere of Ohio. It proved to be a single-component midden, less than 100 x 100 feet in size, representing apparently a farmstead. Similar farmsteads were located during survey work throughout

the Scioto River valley. The midden, located in the bottom lands of the river, was covered by two sterile layers of flood deposit which effectively sealed the cultural horizon from the surface. The extreme significance of this site can be summed up as follows: it is the first settlement in Ohio which has been excavated. Its interlocking radiocarbon dates demonstrate a very late time position within the Hopewellian Interaction Sphere (middle-late 5th century A.D.). The site yielded remains of corn clearly associated with the midden. The artifacts consist of a wide variety of items, including what used to be called classic Hopewell pottery (now: Paint Creek Series). In addition to a brief description of the site and its content, this paper will evaluate the position of the McGraw Site in the temporal and spatial framework of the Hopewellian Interaction Sphere.

Case Institute of Technology

Quimby, George I.

Historic Archaeology and Trade Objects of the Upper Great Lakes

The Historic Period in the Upper Great Lakes can be divided into three parts, early 1600-1670, middle 1670-1760, and late 1760-1820. Diagnostic assemblages of trade objects may be used to date the three temporal segments of the period. These assemblages are illustrated in colored slides.

Chicago Natural History Museum

Rands, Robert L.

Ceramic Technology and Trade in the Palenque Region, Mexico

An intensive technological analysis of pottery from Palenque and nearby sites in Chiapas and Tabasco should help to clarify problems relating to short-distance, domestic trade. Diagnostic combinations of mineral inclusions, native to different clay deposits, serve as a means of distinguishing between related centers of manufacture. Technological aspects of

greater cultural significance, such as temper, also show marked changes, in time and space, over a localized zone. Determination of pottery-producing centers and patterns of subsequent trade in ceramic goods offers a means of testing and refining the concept of the ceremonial center-sustaining area in Classic Maya society.

University of North Carolina

Ritchie, William A.

Recently Defined Late Archaic and Transitional Cultures in New York

Excavations conducted in part on stratified sites by the New York State Museum and Science Service since 1960, have resulted in the elucidation of two new complexes of the Late Archaic stage, both centered in eastern New York. Designated the River phase and the Snook Kill phase, they have been radiocarbon dated, respectively, at 1930 B.C. \pm 100 years and 1470 B.C. \pm 100 years. The terminal Archaic Snook Kill phase was succeeded by another newly defined culture of the Transitional stage, the Frost Island phase, C-14 dated to 1250 B.C. \pm 100 years, and known previously only from surface sites in eastern Pennsylvania and most of New York State. At the O'Neil site in central New York, where this culture was found in 1962, for the first time in a well stratified, multicomponent, radiocarbon dated sequence ranging from Late Archaic to Late Woodland, a few sherds of Vinette 1 ware, the earliest known pottery type in the Northeast, occurred in association with steatite vessel fragments in the upper level of the Frost Island stratum, strengthening our previous evidence dating the initial appearance of pottery in New York State at around 1000 B.C.

New York State Museum

Rosenthal, Jane P. and Alan P. Olson

Survey and Stratigraphic Testing in Southern Guerrero, Mexico

In 1960 a survey of the heretofore little known coastal region of southern Guerrero disclosed 16 major sites. Sherd and figurine collections indicated a

temporal range from the Preclassic to the Conquest and areal connection with Monte Alban, Central Mexican Highlands, the Gulf Coast and Maya regions. In 1963 stratigraphic tests made at three widely separated sites further confirmed the temporal range from the Preclassic to the Historic era and showed more conclusive areal connections. This initial exploratory work gives indication that southern Guerrero is important archaeologically with a long cultural continuum closely related to that of the areas of the advance civilizations of Mesoamerica.

Brooklyn Museum and Museum of Northern Arizona

Rovner, Irwin (see Agogino, George A.)

Sanoja, Mario

A Summary of Venezuelan Archaeology

The ceramic periods of Venezuela began in 1050 B.C. with bichrome pottery in the Orinoco region. Here ceramic cultures manifested themselves through the Saladero, Barrancas, Los Barrancos, and Arauquin Phases with El Mayal on the northeast coast. In the west, the ceramic epoch, began with the bichrome and polychrome ceramics of the Tocuyano Phase, and lasted until historical times through the Betijoque, La Pitia, Guadalupe, and Dabajuro Phases. Between 1150 and 1500 A.D., maize characterized by small cobs, was cultivated. Contemporaneously, plastic decoration flourished on the central coast. El Palito, reminiscent of the Barrancoid tradition, was followed by the Zancudo and Valencia Phases. Venezuelan prehispanic cultures are marked by several cultural centers which show the decisive influence of ecological factors in their development.

Universidad de los Andes

Sargent, Howard R.

A Stratified Site in the Upper Connecticut Valley

The Sumner Falls site, Hartland, Vermont, comprises two distinct occupation zones separated by a sterile alluvial deposit. The upper level yields a Middle Woodland assemblage while the earlier level is of Late

Archaic time with a single radiocarbon date of 2750 \pm 80 years B.P. Proposed research for the coming season will double the excavated area to secure additional carbon samples and to amplify trait lists for both occupations.

Nathaniel Hawthorne College

Shinkwin, Anne (see Campbell, John M.)

Sleight, Frederick W.

Certain Environmental Considerations in
West Indian Archaeology

Major migrations into the West Indies emanated out of South America. For the most part, Tropical Forest traditions were transplanted, but it is obvious that these traditions were influenced by a markedly different environment. People who had previously known a river-tropical forest habitat now encountered the sea with its currents, winds, swells, and expansive transportation potential. Islands, too, sometimes with limited fresh water conditions, presented new problems as well as new opportunities for settlement. Recent work in the Virgin Islands points to the strong influence of environment on the settlement patterns of pre-Columbian peoples. With the advent of extensive archaeological research in the Antillean area, new and valued interpretations must be sought in the cultural-environmental complex.

Central Florida Museum

Smith, Carlyle S.

Excavations on Hiva Oa, 1963

The Pekia site in the valley of Atuona, Hiva Oa Island, in the Marquesas, was subjected to intensive investigation by the Kon Tiki Museum-University of Kansas Expedition, September-December, 1963. Pekia consists of a group of stone platforms and terraces, partly on level ground and partly on a hillside. One large platform served as part of the ceremonial *tohua*. Some of the smaller platforms served as seats, others as house platforms, *paepae*. According to tradition, the site served as an assembly area for all the tribes in the valley. Architectural stratigraphy was ob-

served above and below the surface. Excavation revealed pavements dating from earlier periods extending under later construction. An excellent series of radiocarbon samples was collected from significant levels. Artifacts were scarce, the principal implement being the stone adze. An unusual discovery is a decorated potsherd. The specimen appears to be a fragment of a ceramic disk. One side is plain and the other is covered with an intricate pattern of incised lines. Thus far no parallels are known in Polynesia. A comparative study is in progress.

University of Kansas

Squier, Robert J.

White-Rim Pottery in Middle America

The spatial and temporal distributions of White-Rim pottery, gained from published and some unpublished descriptions, are considered. Variations in this "ware," reflecting different modes of firing treatment, are indicated, and a series of recent experiments attempting to duplicate these variations under controlled conditions are described. The problem of White-Rim pottery as representative of a single tradition of pottery-making is re-examined. A number of statements by different authors concerning the cultural affinities, region(s) of origin, and diffusion of White-Rim pottery in Middle America are evaluated in the light of data presented in this study.

University of Kansas

Struever, Stuart

Middle Woodland Culture History in the Southern
Great Lakes-Riverine Area

This paper points up and illustrates a series of discrete, related problems that together may serve as guide-lines for the elucidation of Middle Woodland culture history in the area of the southern Great Lakes and the major river valleys immediately to the south. These problems include: (1) Establishment of regional style zones (i.e. traditions) within this geographical area during the Middle Woodland period. Available evidence suggests four major traditions can be documented. Appropriate artifact typologies will

allow recognition of micro-style zones within these traditions; four are described within one tradition on the basis of ceramic style variation. (2) The Hopewell Interaction Sphere describes a yet undefined form of interaction which served to articulate a number of localized cultural groups within these and other regional traditions. A complex of raw materials, artifact styles, and modes of burial ceremonialism reflects this intercourse in the archaeological record and served as a basis for definition of the Hopewellian phase in the various traditions. To illustrate, the Hopewellian phase as expressed within the Havana tradition is defined and its known distribution documented. (3) Definition of contemporary, non-Hopewellian cultural complexes occupying portions of the southern Great Lakes-Riverine area is a research objective. Examples of such manifestations within the Havana tradition are suggested. (4) A typology of Hopewellian manifestations is necessary in terms that will allow definition of culture type variation within and between the regional traditions. Mortuary data provide one basis for demonstrating variation in complexity. This is illustrated through a comparison of Hopewellian burial sites in western Michigan, southern Ohio, and central Illinois. Hopewellian living sites yield evidence of differential subsistence-settlement patterns, another aspect of variation between cultural systems. Comparison of recently excavated Hopewellian habitation sites in the Scioto and Illinois valleys provide a clear illustration.

University of Chicago

Stuckenrath, Robert, Jr.

Geological and C-14 Dating of Some Western Fluted-Point Sites: A Preliminary Study

Approximate dates for glacial substages of the northern United States are obtained from C-14 dates of specific geologic context, and are extended to pluvial phenomena of the Southwestern United States. Climatological studies of the Southwest then provide the basis of an alignment of contemporaneous geologic strata in fluted-point sites. The validity of C-14 dates of essentially archaeological contexts from these sites are then assessed in terms of this dated geologic scheme.

University of Pennsylvania

Swanson, Earl H., Jr.

Introduction: The Idea of an American Archaic

The idea of the American Archaic is not new. It was apparently first proposed by Phillips and Willey in 1953. The first effort to assemble descriptive papers pertaining to an implied American Archaic was published in 1959 in American Antiquity. On this occasion, our purpose is to define an American Archaic by examination of regional cultural problems. It seems clear that an American Archaic cannot be both age and stage. It may be that we shall have to treat the idea of an American Archaic as a hypothetical-deductive model. I suggest that the model be marked by conservatism of culture, close adaptation to regional ecological systems, potential for either social evolution or devolution, and time spans on the order of five to seven millennia.

Idaho State University
Museum

Taylor, Morris F.

Contributions of Historical Research to
Archaeological Interpretation

Growing interest in historical Indian occupation of southeastern Colorado and northeastern New Mexico (roughly between the Arkansas and Canadian Rivers) brings to attention the need for an intensive study of historical references which appear to give evidence of occupation of archaeological sites. This paper will endeavor to discuss the problem and to re-examine some of the tribal occupation boundaries and chronology in the above-mentioned area during the historical period. Emphasis will be placed on an understanding of the use of this region by Apaches, Utes, Comanches, Cheyennes, Arapahoes, and Kiowas. Current research on Ute bands, for example, indicates a year-round occupation of a fairly distinct physiographic province east of the Rocky Mountains contemporaneous with High Plains Indian groups. This suggests that the traditional assignment of the Utes mainly to the area west of the front ranges of the Rockies needs reconsideration, at least for the later historical period. This paper essentially is an attempt to extend into the later historical period some aspects of Mr. Galen

Baker's archaeological study of the Park Plateau and the adjacent High Plains.

Trinidad State Junior
College

Tunnell, Curtis

Archaeological Excavations in Amistad Reservoir
on the Rio Grande River in West Texas

At least 250 archaeological sites are threatened with inundation and vandalism on the United States side of Amistad Reservoir. Since 1958, dry rockshelters, open middens, and stratified terrace sites have yielded 10,000 years of prehistory. During the current field season, excavations have been conducted in a very large shelter with stratified dry deposits dating back to about 9,000 B.P., and in a collapsed shelter containing stratified Paleo-Indian and Archaic bison kills.

Texas Memorial Museum

Wallace, Dwight T.

A Monochrome Ceramic Tradition in Peru

The Topara ceramic style of the south-central Peruvian coast forms the heart of a monochrome tradition which has its beginnings in the local Chavinoid phases of the Early Horizon in the Chincha-Canete area and reaches its greatest influence at the end of the Early Horizon, when it is found from the Rimac to the Nazca valleys as trade ware, local copies, or heavy influence on the local styles. The tradition is unique among Peruvian ceramics for the simplicity of decoration and form and stands out from contemporary ceramics for the high technical quality of the ware.

University of Oregon

Wallace, William J.

The Archaeological Sequence in Death Valley
National Monument

For the past twelve years a long-range program of archaeological research, sponsored by the National Park Service, has been underway in Death Valley

National Monument. Investigations have been conducted at a number of localities on the valley floor and in the surrounding mountains, resulting in the locating and recording of several thousand prehistoric sites. The explorations have produced evidences of a lengthy aboriginal occupation, beginning about 9000 years ago and continuing into the time of White contact, which can be divided into four cultural periods. These can be equated with similar phases represented elsewhere in the southern Californian deserts.

Long Beach State College

Warren, Claude N.

The Desert Culture in the Far West

The Desert Culture is distinguished from early hunting cultures found on the western edge of the Great Basin and west of the Sierra and Peninsular Ranges in California. The Desert culture later penetrated these areas and occupied a variety of environments. From this cultural base the so-called archaic cultures of California developed and are characterized by cultural diversification with specialized and sometimes highly productive economies. If the classic definition of Archaic Stage is applied to California, one must ignore the many factors of culture change that do not lead to the development of agriculture.

Idaho State University

White, Marian E.

Settlement Pattern Changes Related to
Agriculture in the Northeast

Settlement pattern characteristics at four time levels during the Late Woodland Period in Western New York indicate that changes are related to the development of agriculture. The settlement pattern of the Historic Period is compared to earlier settlements at the Henry Long Site (Late Woodland IV), the Oakfield Site (Late Woodland III), and the Martin Site (Late Woodland I) to trace the changes from 1650 back to 900 A.D. Changes indicate a shift from the early recurrent settlement to a semisedentary to a semi-permanent village as corn agriculture developed. This research

was supported by NSF grants.

State University of New
York at Buffalo

Williams, Stephen

A Survey of the Upper Tensas Basin, Northeast
Louisiana

Research in this region was undertaken the summer of 1963 as a continuation of the Peabody Museum's Lower Mississippi Survey, and another field season will be carried out this summer. 90 sites were located and ten were tested. The sequence from the Poverty Point horizon to the Historic Tensa was investigated. Significant findings included recognition of the Troyville ceramic complex in the region and the discovery of an early Coles Creek assemblage which is ancestral to the "classic" expression of this important Lower Valley phase.

Harvard University

Winters, Howard D.

Value Systems in the Late Archaic

Analysis of burial and midden associations of artifacts from sites of the Indian Knoll Culture suggest that two major classes of items were present: those without exchange value and those having exchange value in terms of a larger system. Neither group is thought to have values expressible in terms of the other, but the latter group may have internal units representing a rough value scale. It is suggested that the external and internal values of the latter system derive from an extensive trading system postulated for the late Archaic.

University of Virginia

Winters, Howard D.

The Hopewell Interaction Sphere: A Reappraisal

The concept of a Hopewellian Culture is found to have been based on aesthetic determinism, rather than any anthropological concept of culture. Caldwell's

interaction sphere permitted more satisfactory interpretation of "Hopewell" on the basis of interacting regional traditions. But religion was too strongly emphasized as a unifying element. Rather, the organization was that of tribal religions with the introduction of new elements from Mesoamerica resulting in a certain amount of syncretism. It is explicitly denied, however, that "Hopewell" is a Mesoamerican complex. Finally, it is suggested that the interaction sphere is the end product of a trade network having its antecedents in the shell-copper trade system appearing during late Archaic times.

University of Virginia

Wittry, Warren L.

Possible Sun Calendars at the Cahokia Site

Recent excavations at this very large town and ceremonial center uncovered evidence of huge circles of spaced posts. To an observer situated in the center of the circles, certain posts appear to have marked the rising and setting of the sun upon the equinoxes and solstices. In one circle, posts are also placed to suggest observations on the rising and setting of the moon. Factors such as variation in obliquity of the ecliptic, refraction and what position of the sun was taken by the Indians to be sunrise, present difficulties but it does appear that these circles were, indeed, remarkable sun, and perhaps, lunar calendars.

Cranbrook Institute of
Science

Wright, Henry T. (see Griffin, James B.)

Woodbury, Richard B.

Prehistoric Water Management Systems in the
Tehuacan Valley, Mexico

Farming began over 5000 years ago in the Tehuacan Valley, and from almost the beginning probably included simple controls over the water supply, which otherwise was insufficient to grow the quantity and some of the kinds of crops indicated by the archaeological record. After the development of simple terracing, there came into use elaborate irrigation

ditches, canyon-wall aqueducts, and underground channels, all requiring considerable skill and traditional knowledge for their building, and making possible the Classic and Post-Classic urbanization of the region.

U. S. National Museum