The National Research Council and Midwestern Archaeology: The St. Louis Meeting of 1929

by Michael J. O'Brien and R. Lee Lyman

The National Research Council was created in 1916 out of a growing concern that the United States was ill-prepared to enter a war into which it slowly but surely was being pulled. The council's purpose was to assist the National Academy of Sciences, which had been signed into existence by President Abraham Lincoln in 1863, in advancing the cause of knowledge and advising the federal government on matters of science and technology. From its inception the NAS had undertaken a wide variety of studies for different branches of government, but by the second decade of the 20th century it was obvious that the body was too small to deal effectively with the exponential growth of science and technology taking place not only in the United States but also in Europe and Russia. Members of the NAS, including the outspoken

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astrophysicist George E. Hale, who served as the organization's foreign secretary, saw this scientific and technological explosion as a potential threat to the security of the United States. At Hale's instigation members urged President Woodrow Wilson to create a body that could broaden the scope of the NAS and coordinate efforts among government, industrial, and educational organizations to strengthen not only national defense but the security of American industry as well (Cochrane 1978; Hale 1916, 1919). Hale was made the first chairman of the newly created council, which drew its membership from universities, private research institutions, and various branches of government. After the war, the NRC was made a permanent body when President Wilson signed Executive Order No. 2859 on May 11, 1918.

This was how Vernon L. Kellogg, permanent secretary of the NRC, saw the charter of the organization:

The council is neither a large operating scientific laboratory nor a repository of large funds to be given away to scattered scientific workers or institutions. It is rather an organization which, while clearly recognizing the unique value of individual work, hopes especially to help bring together scattered work and workers and to assist in coordinating in some measure scientific attack in America on large problems in any and all lines of scientific activity, especially, perhaps, on those problems which depend for successful solution on the cooperation of several or many workers and laboratories, either within the realms of a single science or representing different realms in which various parts of a single problem may lie. It particularly intends not to duplicate or in the slightest degree to interfere with work already under way; to such work it only hopes to offer encouragement and support where needed and possible to be given. It hopes to help maintain the morale of devoted isolated investigators and to stimulate renewed effort among groups willing but halted by obstacles. (National Research Council 1921:6)

The NRC until 1943 was divided into two broad sections, one concerned with relationships with the government and other bodies, and the second representing specific scientific disciplines. Each section was subdivided into divisions, with the membership comprising representatives of scientific societies and various government departments. One division on the scientific side of the house was the Division of Anthropology and Psychology, which during its lifetime oversaw the creation of 55 committees, each charged with specific tasks dictated by members of the division's executive board. As one might expect given the diversity of subject matter subsumed under the broad rubric of anthropology and psychology, the committees were diverse in terms of pur-

pose. One of the first committees created was the Committee on State Archaeological Surveys (CSAS) in 1920. Clark Wissler, curator of anthropology at the American Museum of Natural History in New York City and chairman of the Division of Anthropology and Psychology, reported on the formation of the committee:

A committee was appointed to encourage and assist the several States in the organization of State archaeological surveys similar to the surveys conducted by the States of Ohio, New York, and Wisconsin. The chairman of this committee is R. B. Dixon, of Harvard University. The plan contemplates the coordination of all the agencies within those States, enlisting the cooperation of local students and interested citizens so that an effective appeal may be made to the various State legislatures for special appropriations for these surveys. (National Research Council 1921:53)

Roland B. Dixon, an ethnologist-archaeologist who was curator of ethnology in the Peabody Museum (Harvard) and had served as president of the American Anthropological Association in 1913, was joined on the CSAS by Berthold Laufer, an expert on Chinese art and material culture who was on the staff of the Field Museum of Natural History in Chicago, and C. E. Seashore, a neuropsychologist at the University of Iowa and the man who would succeed Wissler as chairman of the Division of Anthropology and Psychology. Subcommittees were created in four states-Illinois, Indiana, Iowa, and Missouri (Indiana Academy of Science 1921:79; National Research Council 1921:54). In July 1921 Dixon resigned as chairman and the CSAS was reorganized, with Wissler, having completed his term as chairman of the Division of Anthropology and Psychology, serving as committee chairman and Dixon, Laufer, Frederick W. Hodge of the Museum of the American Indian (Heye Foundation) in New York City, and Amos W. Butler of Indianapolis serving as members. Hodge was an ethnologist-archaeologist who before assuming the directorship of the Museum of the American Indian had worked at the Bureau of American Ethnology, where he was appointed ethnologist-in-charge in 1910 (Lonergan 1991:294). Butler was an ornithologist of considerable reputation, having founded the Indiana Academy of Science in 1885. The committee was expanded to seven members a year later and, to obtain better geographic coverage, to eleven members in 1924.

One might well ask why such an important entity as the National Research Council was involved with state archaeological surveys when there were other, seemingly more important scientific and technological issues facing postwar America. The answer lies in the credentials and political acumen of several key anthropologists involved with the NRC from the start. Dixon was influential from his post at Harvard, having not only served as president of the American Anthropological Association but also trained a generation of archaeologists and ethnologists. Wissler was a powerful force in Americanist archaeology and ethnology from his dual positions as curator of anthropology at the American Museum and later as professor of anthropology at Yale. Working under Wissler at the museum were some of the leading figures in southwestern anthropology—Leslie Spier and Nels Nelson, for example—and Wissler was friends with Alfred L. Kroeber, the most influential anthropologist in the western half of the United States from his position at the University of California and the person who on July 1, 1921, assumed the vice chairmanship of the Division of Anthropology and Psychology. As division chairman, Wissler had the respect of the discipline and could guide the unit's direction. One of the first things he did was create the Committee on State Archaeological Surveys.

One impetus for forming the committee was the destruction of archaeological sites that was occurring with increasing frequency across the eastern United States, much of it the result of indiscriminate fieldwork by amateur societies. Making matters worse was the fact that there were no baseline data against which to judge the magnitude of destruction. In other words, site surveys had never been conducted in most states, and hence there was no way to gauge the percentage of sites being destroyed. A few states such as Ohio, New York, and Wisconsin had long had organized state surveys, and Wissler was determined to see similar surveys established in other states. The best means of accomplishing that objective was through an arm of the Division of Anthropology and Psychology, which, following Kellogg's vision, would act as both an organizing body and a clearinghouse for information.

The decision on the part of the CSAS to focus first on Illinois, Indiana, Iowa, and Missouri was not entirely accidental. All four had strong statewide support for science and history as well as active historical and scientific societies. The decision to include Indiana certainly was no surprise given that Wissler grew up there and had received all his degrees, including one in law, from the University of Indiana (Guthe 1940). Carl Guthe of the Museum of Anthropology at the University of Michigan assumed the chairmanship of the Committee on State Archaeological Surveys in 1927, and he reported a year later at the International Congress of Americanists meeting in New York that

Before the end of 1920, interest had been awakened in Illinois and Indiana. A discussion of the Illinois project constituted a part of the meeting of

Section H [Anthropology] of the American Association for the Advancement of Science at Chicago in December of that year. A few days prior to this, the plans for a similar project for Indiana had been presented to the Indiana Academy of Science and the Indiana Historical Conference, both of which organizations appointed committees to further the work. During 1921, W. K. Moorehead began his excavations at the great Cahokia mound group in East St. Louis, Illinois, working in cooperation with the University of Illinois, and in Indiana the State Historical Commission and the State Department of Conservation, through the State Geologist, jointly developed a survey of the State by counties, recording all facts of an archaeological nature obtained either by field parties or questionnaires. (Guthe 1930:52)

With respect to the composition of the four state committees, Wissler (1922:233) reported soon after their formation that

In Indiana the State Academy of Sciences and the Historical Society appointed a State committee to cooperate, viz., Dr. Frank B. Wynn, Dr. Stanley Coulter, Judge R. W. McBride: for Illinois and Iowa similar State committees; Illinois, Dr. Berthold Laufer, Dr. Otto L. Schmidt, Dr. Charles L. Owen; Iowa, Prof. B. F. Shambaugh, Dr. E. R. Harlan, E. K. Putnam. The Missouri survey was initiated by the Anthropological Society of St. Louis and is under the direction of the following committee representing a number of societies and institutions: Dr. R. J. Terry, Leslie Dana, B. M. Duggar, R. A. Holland, George S. Mepham, Dr. H. M. Whelpley, J. M. Wulfing, Dr. C. H. Danforth. Satisfactory progress has been made in each of these States. The Indiana Survey is by the State [statute] under the direction of the State Geologist. In Iowa the work has begun under a grant from the [State Historical Society of Iowa]; in Missouri under a fund raised by the above-mentioned committee. As the results of all these surveys will be published, the outlook is stimulating.

For a perspective on the goals and methods of the state organizations that were supported by the Committee on State Archaeological Surveys, we can examine the Anthropological Society of Missouri, which was in many ways typical of the kinds of organizations that the committee was attempting to assist. Like societies in some of the other states, it grew out of an amalgam of earlier organizations, or more precisely, out of a recombination of members from different societies, some of which had long histories. The earliest scientific society in Missouri was the Academy of Science of St. Louis, which was formed in March 1856. Fifteen members—seven medical doctors, three lawyers, and five professors—attended the first meeting, and the constitution and bylaws they adopted spelled out the objectives of the fledgling society:

Section 1. It shall have for its object the promotion of Science: it shall embrace Zoology, Botany, Geology, Mineralogy, Palaeontology, Ethnology (especially that of the Aboriginal Tribes of North America), Chemistry, Physics, Mathematics, Meteorology, and Comparative Anatomy and Physiology.

Sec. 2. It shall furthermore be the object of this Academy to collect and treasure Specimens illustrative of the various departments of Science above enumerated; to procure a Library of works relating to the same, with the Instruments necessary to facilitate their study, and to procure original Papers on them.

Sec. 3. It shall also be the object of this Academy to establish correspondence with scientific men, both in America and other parts of the world. (cited in O'Brien 1996:42)

The Academy of Science of St. Louis was small, but it was anything but dormant. In terms of topics that were pursued by the members, there was little in the realm of science that did not fall under the academy's purview. Understandably, topics that fell broadly under the rubric of natural history, including ethnology, archaeology, and paleontology, enjoyed keen interest. From the beginning, the academy reached out to eastern societies and institutions, perhaps as a means of gaining recognition but probably also because of an insatiable thirst for knowledge on the part of its highly educated members. The academy had established two types of membership, associate and corresponding, the former for members living in St. Louis County, and thus able to attend meetings, and the latter for persons living elsewhere. It is obvious from examining the Journal of Proceedings for the first month and a half of the society's existence that members were interested in adding to the corresponding membership some of the most well-known names in science-men such as Joseph Henry, first secretary of the Smithsonian Institution; Ferdinand V. Hayden, geologist with the U.S. Geological Survey; and Joseph Leidy of Philadelphia, arguably the top vertebrate paleontologist of the time.

The Academy of Science of St. Louis was active in archaeological field work through the late 1800s (O'Brien 1996), but by the turn of the century it had been eclipsed in prominence by the Missouri Historical Society, which had been founded in 1866, and within a few more years by the St. Louis Society of the Archaeological Institute of America (AIA), which was organized in 1906. From its beginning the historical society maintained an active interest in prehistory and as early as 1880 proposed a statewide survey of known archaeological sites (Broadhead 1880). The society was also intensely interested

in obtaining collections of artifacts from Missouri sites, as remarks made by Frank Hilder in 1880 made clear:

[Hilder] spoke to the disjointed efforts made to collect relics of the people who once dwelt in these lands. It was certainly most discreditable that one had to resort to the Smithsonian Institut[ion], the Peabody Museum, and the Blackmore Museum in Salisbury, England, to find proper collections of our prehistoric remains. He hoped to see the time when St. Louis would possess a collection in which the ancient history of the race can be studied.

The spirit in which the work had been begun by the Historical Society gave promise that it would be the agency to bring together a collection which would not only rival, but surpass, any similar archaeological and historical collection.¹

The society didn't waste any time in following up on Hilder's plea, as is evidenced by an advertisement placed in the January 23, 1881, edition of *The Missouri Republican* (cited in Trubowitz 1993): "The Society particularly wishes to procure archaeological specimens, popularly known as Indian curiosities or stones, flint arrow and spear heads, chisels, discoidal stones, stone axes, pottery from mounds, etc., and will be thankful for every object of this class." The historical society was extremely successful in acquiring various collections; an inventory made in 1903 showed that the organization had at least 11,000 artifacts in storage and almost 14,000 on display in 42 cases (Trubowitz 1993:3).

The other St. Louis organization that was gaining prestige in the early 20th century was the local affiliate of the Archaeological Institute of America, known as the St. Louis Society. Over 100 people attended the organizational meeting on February 8, 1906. The AIA had been formed in 1879 with the goals of "promoting and directing archaeological investigation and research, — by the sending out of expeditions for special investigation, by aiding the efforts of independent explorers, by publication of reports of the results of the expeditions which the Institute may undertake or promote, and by any other means which may from time to time appear desirable" (Archaeological Institute of America 1880:6).

One activity sponsored by the St. Louis Society was Gerard Fowke's (1910) survey and excavation of sites in southeastern and central Missouri. Fowke was a peripatetic journeyman connected at times with the Bureau of American Ethnology (O'Brien 1996:124–36), but it apparently was an unsalaried connection. The research proposal that was drawn up in advance of Fowke's work in Missouri has a modern ring to it (Pool 1989:28): Records of the No-

vember 1906 meeting state that "[I]t was unanimously agreed from the outset that, in the archaeological investigations that were proposed, the object should be scientific results, whether negative or positive, rather than in the making of large finds of relics; and that a district should be selected and worked systematically, regardless of whether the finds were great or small, so that the archaeological record might be complete."²

To note that Fowke aligned himself with the St. Louis Chapter of the Archaeological Institute of America does not do justice to an important episode in the history of Missouri archaeology, because the relationship that apparently developed between Fowke and the chapter was much more productive than is evident on the surface. In many respects the relationship between Fowke the professional and the nonprofessional chapter members foreshadowed what was to come several decades later with the founding of the Missouri Archaeological Society in 1935, and it was the kind of relationship that Wissler hoped to foster through the Committee on State Archaeological Surveys. To understand the relationship between Fowke and the St. Louis chapter of the AIA requires a brief discussion of a group with the bizarre name of the "Knockers" that was formed by members of three local St. Louis organizations: the Archaeological Institute of America, the Academy of Science of St. Louis, and the Missouri Historical Society. The spark of this group was a father-and-son combination—David I. Bushnell, Sr. and Jr.—the latter of whom had begun to make a name for himself in archaeology. Never formally trained as an anthropologist, Bushnell, Jr., worked as an assistant for the University of California in the 1890s, for the Peabody Museum (Harvard) between 1901 and 1904 (e.g., Bushnell 1904), and as an employee of the Bureau of American Ethnology beginning in 1907.

Browman (1978:2) suggests, and we think he is correct, that it was Bushnell's emerging prominence in the field and his ties to institutions such as the Peabody Museum that acted as a magnet in attracting other professional archaeologists such as Fowke to St. Louis. And it wasn't only Fowke who began keeping company with the Knockers. Browman notes that leading archaeologists of the day—men such as Earl H. Morris, who went on to have a distinguished career as a southwestern archaeologist with the Carnegie Foundation, and Edgar Hewett, a southwesternist and Mayanist who in 1906 became director of American research with the Archaeological Institute of America—regularly turned up at various meetings of the Knockers.

By at least the early 1920s, another group, the Anthropological Society of St. Louis, had been formed. It was organized "chiefly by members of the Medical School in Washington University" and had the purpose of "bringing together all the institutions in St. Louis interested in historical and archaeological work."3 This was the group that was identified by the Committee on State Archaeological Surveys as its contact point in Missouri—a status reflected in the organization's being listed in the "Notes on State Archaeological Surveys" (Wissler 1922:233). At least two members of the Knockers-George S. Mepham and J. M. Wulfing-are listed as members of the committee, along with Dr. Henry M. Whelpley, a pharmacist, and Dr. R. J. Terry and Dr. Charles H. Danforth, both of whom were on the staff of the Washington University School of Medicine. Whelpley, an avid artifact collector (Blake and Houser 1978), was one of the driving forces behind the local chapter of the AIA and had long advocated a statewide survey of Missouri (Pool 1989:28). Thus the group that was put together to represent the state to the Committee on State Archaeological Surveys might have been short on professional archaeological expertise, but few states had a more respected body to coordinate such a survey than Missouri.

Wissler, as he would do with other state groups, offered the St. Louis group advice on what the goals of a statewide survey should be. In a long letter to Danforth, secretary of the St. Louis society, Wissler noted that

As I see the problem in such State surveys, there are, in the main, two alternatives: First, to project a rapid comprehensive survey of the State to be carried out in a year or two and to be supported by a specific appropriation. Second, the inauguration of a modest program under the auspices of a society or some existing State agency that can be counted upon to continue the work of the survey indefinitely.

To my way of thinking, the second is preferable. For one thing, an appropriation of sufficient magnitude for quick comprehensive survey is not likely to materialize. On the other hand, if fortune did favor us and the appropriation were made by the State, we could not look forward with confidence to a continuation of the work in the future.⁴

Wissler also made sure Danforth understood that support for the state survey "must necessarily be found within the State concerned. No direct financial support from the outside can be expected." Apparently Wissler's warning did not dampen the St. Louis group's enthusiasm, because Danforth soon wrote him back, noting that "Several hundred dollars are already in sight and it is proposed to make an immediate (next spring) survey of St. Louis County and,

if possible, inspire simultaneous surveys of several other favorable counties."⁵ Despite this enthusiasm, there is no evidence that the planned surveys were ever carried out, and by 1928 the Anthropological Society of St. Louis was listed as "inactive."⁶

Yearly reports of state surveys appeared in the American Anthropologist from 1922 to 1934, when that journal decided no longer to carry them. They then moved to the newly created journal American Antiquity. Some of the later summaries also appeared in various volumes of the Pan American Union Bulletin. As Guthe (1930:56) pointed out, the initial survey summaries were so well received that

the Committee several years later sought and secured the cooperation of those institutions which were not State agencies, but were likewise engaged in archaeological research. Their cordial response made possible the expansion of these summaries to record nearly all of the archaeological fieldwork in North America. That this aspect of the Committee's activities has been a popular one is evidenced by the growth of the summaries. That for the year 1921 contains reports from thirteen State agencies [Wissler 1922], that for the year 1924, the first of the expanded summaries, gives reports from eleven State agencies and eight other institutions [Kidder 1925], that for 1927 reports on the work of nineteen State agencies, and thirteen other institutions [Guthe 1928]. Today the Committee conducts a correspondence with representatives of fifty-one institutions.

Summaries were prepared by contributing correspondents from whichever state organization was sponsoring the work. Twelve states—Alabama, Arizona, California, Colorado, Illinois, Indiana, Kansas, Nebraska, New York, Ohio, Tennessee, and Wisconsin—plus New England were represented in the first set of summaries, which were for work carried out in 1921. If one were to read only what was published, it might sound as if the Committee on State Archaeological Surveys was making significant inroads into establishing statewide surveys across the Midwest and East, but all was not what it seemed. For example, although Nebraska and Kansas submitted summaries for 1921, Wissler made it clear in a letter to C. E. Seashore, who had succeeded Wissler as chairman of the Division of Anthropology and Psychology, that all was not well in those states: "The situation in Nebraska is such as to render inadvisable any effort to launch a survey. The organizations that should be interested in the project are not working in harmony, chiefly because of the questionable scientific character of some of the men.... There is considerable interest in the subject in Kansas, but no live leadership at present."⁷

By the summer of 1922 local committees in several states were so well run that the national committee discontinued its official connection with them (Guthe 1930:53). At the same time, several Midwestern states were asking for support, and in 1923 Wissler's committee began developing a plan for surveys in the Mississippi Valley, which led to the circulation of a pamphlet on suggestions regarding the aims and methods of statewide surveys (Wissler et al. 1923; see Appendix). Costs associated with production of the pamphlet were subsidized by the State Historical Society of Iowa. Interestingly, the secondary message of the pamphlet was that all work should be done by or under the supervision of professionally trained individuals—a theme that would run throughout the course of the committee's activities and eventually lead to two NRC-sponsored regional meetings of professionals and nonprofessionals.

Wissler retired as chairman in July 1924 and was replaced by A. V. Kidder, a Harvard-trained archaeologist working in the Southwest under the aegis of Phillips Academy in Andover, Mass. The CSAS was again enlarged and consisted of holdovers Wissler, Roland B. Dixon, Frederick W. Hodge, Amos W. Butler, Marshall Saville, Charles E. Brown, and Peter A. Brannon, and new members W. C. Mills of the Ohio State Archaeological and Historical Society, Henry M. Whelpley of the Anthropological Society of St. Louis, and Charles R. Keyes of the State Historical Society of Iowa. Guthe (1930:53-54) noted that during Kidder's service as chairman, the CSAS "continued to extend its contacts, particularly in the southern and western portions of the country and its function as an advisory board was thereby strengthened and expanded."8 Under both Wissler's and Kidder's chairmanship the committee continued to hold formal as well as informal meetings-for example, at the American Association for the Advancement of Science meeting in Cincinnati in 1923 and at the Central Section (later the Central States Branch) of the American Anthropological Association meeting in Columbus, Ohio, in 1926.

Kidder resigned his position as chairman of the Committee on State Archaeological Surveys in fall 1927, and Carl E. Guthe of the University of Michigan succeeded him. Under his chairmanship, which lasted until 1937, the committee stabilized and became the organizing force for which it had been designed. Given his position and training, as well as his enthusiasm, Guthe was a natural choice to head the committee. He went to great lengths to increase the effectiveness of the committee in its relations with nonprofessionals, even taking an extended trip in the summer of 1928 to visit coordinating offices in 15 states in the Mississippi Valley. He later recalled, "Impressed by

the attitudes and accomplishments of these earnest amateurs, I felt they deserved to be helped rather than censured" (Guthe 1967:434). Perhaps, but he did not mince words in the report that summarized what he found during his trip. For example, with respect to Arkansas he stated that archaeology there was "the hobby of [Samuel C.] Dellinger, a biologist at the State University who has seen fit to leave our letters unanswered.... The 'Arkansas Museum of Natural History and Antiquities' is a newly formed group, with a big paper organization. The situation here is pathetic because of the well-intentioned but blissfully ignorant enthusiasm of the promoters. A quantity of extremely obvious frauds have been purchased by them."

Despite the decade-long effort of the committee to foster cooperation among various state organizations and to channel local energies into less commercially motivated activities, the outlook was still bleak in 1929, as Guthe (1967:435) recalled almost four decades later:

In 1929...archaeological explorations were under way in about half of the states of the Union, many of them carried out by lay students of the subject. The lack of communication between groups was enormous. State political boundaries served as corral fences, preventing archaeologists in one state from communicating with their colleagues in adjacent and neighboring states. Nor were the channels of communication between the professional and the serious-minded laymen as broad and open as they should have been.

The professionals were outspoken in their condemnation of Indian-relic collectors and dealers who destroyed irreplaceable archaeological evidence. . . . Equally objectionable, because of the resulting destruction of evidence, were the activities of well-intentioned amateurs who did not understand the dangers of careless excavation and neglected to keep adequate records.

The only possible solution to the problem resided where it had for the previous decade: "the cultivation and friendly education of another type of amateur," namely, the "[s]erious-minded, thoughtful collectors, [who,] intrigued by the conditions and associations under which the relics were found, sought information on their origins and functions by consulting libraries, fellow collectors, and, when possible, professional archaeologists" (Guthe 1967:435). By 1929 this approach had paid dividends but certainly not big ones. How could the Committee on State Archaeological Surveys change the situation? The answer, it seemed, was to hold a large conference and attack the issue head on. Not simply a conference such as had been held at the annual meetings of the American Anthropological Association and the Ameri-

can Association for the Advancement of Science—those were attended only by professionals—but a large gathering of amateurs as well as of professionals, where the former could listen to recommendations offered by the latter, and the latter could listen to the concerns of the former.

This is how Knight Dunlap, chairman of the Division of Anthropology and Psychology from 1927 to 1929, pitched the conference to Edmund Day, director of the Laura Spelman Rockefeller Memorial, the foundation Dunlap approached for funding to offset the estimated \$3000–4500 needed to host such a meeting:

The Conference on American Archaeology seems to be the most important thing to be done for the anthropologists at the present time. Some of the mid-western states are "sold" on the idea of comparative work, and realize that institutions working, or wishing to work on their mounds, etc., do not wish to "rob" them, or to interfere with "States Rights." Other states are still on the defensive. It is believed that in this Conference the officials of states already favorable would help with the other states. . . . The most favorable place in which to call this Conference, seems at present to be Indianapolis. ¹⁰

The Conference on Midwestern Archaeology

Given the model nature of the statewide survey of Indiana, its capital was a logical venue for such a meeting, but Indianapolis was passed over in favor of St. Louis. Fifty-three people, including 9 of the 11 members of the Committee on State Archaeological Surveys, attended the 2-day conference, which was held at the Hotel Coronado on May 17-18, 1929. Among them were Dunlap; Henry S. Caulfield, governor of Missouri; W. E. Freeland, majority leader in the Missouri House of Representatives; G. R. Throop, chancellor of Washington University; Thomas M. Knapp, chancellor of St. Louis University; John C. Futrall, president of the University of Arkansas; Rufus Dawes, president of the Chicago World's Fair Centennial Celebration; and William J. Cooper, U.S. commissioner of education. Those on the professional-anthropological side included Matthew W. Stirling, chief of the Bureau of American Ethnology; Fay-Cooper Cole of the University of Chicago, chairman of the Division of Anthropology and Psychology from 1929 to 1930; William S. Webb, head of the newly created Department of Anthropology and Archaeology at the University of Kentucky; Frans Blom, director of the Department of Middle American Research at Tulane University; J. Alden Mason of the University of Pennsylvania; and Clark Wissler and Nels Nelson of the American Museum of Natural History. Several state archaeologists and geologists also attended the meeting, including Calvin S. Brown, an archaeologist with the Mississippi Geological Survey, and M. M. Leighton, chief of the Illinois State Geological Survey.

Three fairly high-profile amateurs also attended—Don F. Dickson of Lewiston, Ill.; Harry J. Lemley of Hope, Ark.; and Jay L. B. Taylor of Pineville, Mo. Dickson had earned a reputation as a preservationist by erecting a structure over human skeletons he unearthed on his property in Fulton County, Ill. (Harn 1980), and Lemley was a collector of Caddoan artifacts, although he had contact with professionals throughout part of his life (O'Brien and Lyman 1998:65–66) and would go on to publish articles on his excavations (e.g., Lemley 1936; Lemley and Dickinson 1937). Taylor had assisted Warren K. Moorehead in his excavations at Cahokia, located across the Mississippi River from St. Louis in Collinsville, Ill. (Moorehead 1929a), and he knew Wissler and Nelson very well—in the case of Nelson all too well, for it was Nelson (1928) who in a very clear and concise argument shredded Taylor's (1921a, 1921b) claims of authenticity of a bone with an engraving of a mastodon that Taylor ostensibly had found in a cave in southwestern Missouri (O'Brien 1996).

The conference consisted of three parts: (1) an open meeting of the Committee on State Archaeological Surveys on Friday morning, followed by a trip to Cahokia mounds guided by Moorehead and an evening lecture by Henry C. Shetrone, director of the Ohio State Museum; (2) the main conference on Saturday morning and afternoon; and (3) Saturday evening dinner and presentations, which were broadcast on radio station KMOX. In looking through the conference proceedings, one is struck by the disparity of topics that were addressed. As one might expect, given the ink that had been spilled up to that point, numerous presenters, from Gov. Caulfield on down, spoke of preserving archaeological sites for the future. There were polemical statements on the need for preservation, which is not unexpected given the political nature of the meeting and the fact that some of the presentations were being broadcast to the public, but there also were presentations that dealt with specific advantages that accrued from preservation, such as increased tourism. Several presenters excoriated vandals and relic hunters for the catastrophic damage done to an irreplaceable resource-exactly the problem the committee had been working for a decade to solve, with little visible success. Arthur C. Parker made

persuasive arguments in this direction in his paper, "The Value to the State of Archaeological Surveys." He laid out four reasons for surveying and preserving archaeological remains:

- 1. Archaeology explains the prehistory of the state.—The recoveries from ancient sites constitute visual exhibits of the people who occupied the state before the coming of a population of European origin....
- 2. Archaeological remains constitute a vast reservoir of valuable knowledge.—Judged by every moral standard the state is bound to conserve and protect its resources. The aboriginal sites within each state constitute unique and fundamental sources of archaeological facts, highly valued by the scientific world....
- 3. Archaeological remains are monumental exhibits.—The marking of prehistoric Indian sites and their protection from promiscuous digging would not only attract the attention of the sight-seeing public, but would stimulate the investigation by scientists....
- 4. Archaeological collections are exhibits of lasting worth.—Wherever archaeological collections have been made by trained students of prehistory the resulting exhibits and publications describing them have constituted genuine contributions to knowledge. (Parker 1929:33–34)

Parker railed against unskilled collectors and the effect they were having on the archaeological record:

The relic-hunter digs only to destroy and his recoveries are often abortive things with undetermined parentage.... Whether the relic-hunter will continue to ruin the field, or whether state-supported agencies shall preserve the field and draw from it the information that an enlightened age demands, depends very largely upon the citizens of each state; but it depends most of all upon how thoroughly archaeologists who understand the importance of their quest are able to present it to the public. Archaeology must advertise and it must seek thereby to stimulate such a desire to know more of prehistory that support will follow. (Parker 1929:37–38)

It was one thing to say that states should take control of preserving their archaeological resources, but there was a catch, and Parker knew it: Which organization within a state was best suited to carry out a survey and to spearhead preservation efforts? Parker (1929:34) pointed out that it "matters little what institution or agency promotes the survey so long as its operating force is composed of trained archaeologists familiar with the problems to be met or capable of meeting these problems when they occur." To him the ideal institution, "other things being equal, is a state museum, for then there will be a centralized repository for the specimens, and at least a certain amount of cleri-

cal and professional help." He then noted—an understatement if there ever was one—that "A specially constituted commission cooperating with local groups may have difficulty in meeting the problem of distributing the recoveries, especially when it has invited the aid of numerous local historical and scientific societies" (Parker 1929:34–35). In other words, if a loose amalgam of persons constitutes the committee, how are they going to maintain control of the artifacts that result from field exercises, especially when their field crews consist of collectors? Even when a solid organization such as a state museum acts as the coordinating body, local organizations and municipalities will want to maintain control over artifacts, and as Parker noted, the organizing body is going to have to educate them to the dangers in so doing. The modern reader is struck by the fact that some things haven't changed much since 1929 when it comes to civic pride and private ownership of artifacts.

Although the topic of preservation and statewide committees dominated the Conference on Midwestern Archaeology, close reading of the proceedings turns up a few passages that give us some idea of the state of archaeological method in 1929. Three papers and a prepared set of remarks on one of those papers furnish useful examples. The title of the paper by Emerson F. Greenman, curator of archaeology at the Ohio State Archaeological and Historical Society, was "A Form for Collection Inventories." Greenman received his Ph.D. from the University of Michigan in 1927 and had worked with Guthe in the university's anthropology museum; thus he was no novice when it came to artifact analysis. He began his paper by noting that "In view of the increasing activity in state archaeological survey work, some attempt should be made to bring about uniformity in the use of terms, and in the methods of describing archaeological objects, in order that the work done in one state may be compared with that in adjoining states.... Distributions [of artifacts] common to more than one state can only be worked out by the use of a uniform terminology" (Greenman 1929:82-83).

The classification system Greenman (1929:83–84) proposed was fairly rigorous and obviously had been well thought out. The system revolved around the identification of types, which Greenman defined as "the frequent linking together of a number of features on the same specimen" (p. 83). He identified eleven projectile-point characteristics useful for defining types and twenty-one other characteristics as providing a means of narrowing the type definitions. He also listed four other sets of characteristics—those related to the overall shape of a projectile point—which were used as initial sorting criteria. Thus

a point could be angular/side-notched; wide-stemmed; and have wide, shallow notches. Greenman even devised a shorthand notation for his system; in our example just cited, such a specimen would be listed as an A/A, 5, 13. In several respects the system exhibited characteristics of some modern approaches to classification, including paradigmatic classification (Dunnell 1971; O'Brien and Lyman 2000).

Classification theoretically serves two functions—to structure observations so that they can be explained and to provide a set of terminological conventions that allows communication. In the United States, early classification systems were developed solely as a way to enhance communication between researchers who had multiple specimens they wanted to describe (see Dunnell's [1986:156-59] discussion of Rau [1876] and Wilson [1899]). The "Report of the Committee on Archeological Nomenclature" (Wright et al. 1909), which was commissioned early in the 20th century by the American Anthropological Association, exemplified this kind of approach. Since the intent of the persons devising the classification schemes was to standardize terminology, most systems were based on readily perceived differences and similarities among specimens. This meant that form received the greatest attention. However, despite the best efforts of the classifiers, form and function often were conflated. Certainly this was the case with the system devised by the Committee on Archaeological Nomenclature, headed by Charles Peabody of Phillips Academy. Despite the statement that "it has been the particular aim of the Committee to avoid or to get rid of those classes and names that are based on uses assumed but not universally proved for certain specimens" (Wright et al. 1909:114), many of the committee's unit names—such as vessels, knives, and projectile points—have functional connotations in English.

Piles of more or less similar-looking specimens that late 19th- and early 20th-century classifiers were forever creating lacked any archaeological meaning: "In an effort to make categorization more systematic and scientific, these early workers had arbitrarily focused on formal criteria that lacked any archaeological or ethnographic rationale" (Dunnell 1986:159). Further, variation in artifact form within each pile—and to some extent between piles—of specimens had no perceived explanatory value and was simply conceived as noise resulting from different levels of skill in manufacturing or from raw-material quality.

Greenman's scheme was different because he emphasized the identification of variation and established a concise set of criteria to be used in the identification. Using precise language, Greenman (1929:84) explained the rationale behind his classification system: "It is the intentional forms whose distributions are significant, and for that reason stress is laid upon the *types*." In other words, the classification system was developed to create groups that had spatial (and perhaps temporal) meaning; haphazard or idiosyncratic classification couldn't produce such groups. Greenman obviously believed that types were reflections of what the original makers of the projectile points had in mind—hence his use of the term "intentional forms." The epistemological significance of types would be an issue with which Americanist archaeologists would wrestle for decades after Greenman presented his system (e.g., Ford 1954a, 1954b, 1954c; Spaulding 1953, 1954a, 1954b).

The paper by Frederick W. Hodge, which was read by Roland B. Dixon, was titled "The Importance of Systematic and Accurate Methods in Archaeological Investigation." It was a primer on select topics in archaeological method, including analytical uses to which certain artifacts can be put. For example, Hodge (1929:20) pointed out that pottery was "the most important means of cultural determination" available to the archaeologist. It was "the master-key, above everything else made by primitive man, to the determination of multiple occupancy through stratification, and by its usual fragile character it commonly did not find its way very far from the place of manufacture. It stands to reason therefore that it is of the greatest importance" (Hodge 1929:21). Being a product of the late 19th century and the stage-like evolutionism of Edward B. Tylor (1871), Lewis Henry Morgan (1877), and others, Hodge (1929:21) went on to note that "Not all Indians made pottery, to be sure, for some were low indeed in the culture scale, subsisting on the products afforded by a not too prodigal nature and making little in the way of utilitarian, ceremonial, or esthetic objects that have survived to the present time."

Warren K. Moorehead picked up on the notion of cultural complexity in his paper, noting that in the eastern United States there existed a large territory "in which mound art... is rather highly developed. Surrounding it in the greater area, mounds and their contents indicate less complex cultures" (Moorehead 1929b:74–75). Moorehead, whose view of archaeology was greatly colored by his work on Ohio mounds (Moorehead 1892a, 1892b, 1897) and by his on-going work at Cahokia (Moorehead 1927, 1929a; see Kelly 2000), developed a 19-point scale for measuring the culture status of mound-building peoples. The "famous Hopewell culture of the lower Scioto valley [Ohio]" received 13 points, and "the high Etowah culture of north Georgia

and of the Tennessee–Cumberland valleys of Tennessee" 11 points. Fort Ancient—a term originally coined by W. C. Mills (1906) to refer to non-Hopewellian culture in southern Ohio and surrounding regions—was lower still. To Moorehead (1929b:75), Fort Ancient meant "neither high mound builder art nor yet an exceeding low status but might be roughly compared with the term middle class, commonly employed to differentiate the bulk of individuals from those who are extremely well to do or very poor." Illinois Hopewell groups fared less favorably, receiving eight points, but they outscored groups in southern Georgia and Florida, which received only four or five points, despite the fact that "there are an enormous number of shell mounds, platforms for houses or temples, and indications of a very heavy and industrious population" (Moorehead 1929b:75).

Moorehead (1929b:74) admitted there was "overlap" between the "distinct mound builder cultures" and that archaeologists "have gone entirely too far in extending the boundaries of certain of these cultures." Related to this problem was the origin of the various mound-building groups, and in his paper Moorehead focused specifically on the southern-Ohio Hopewell. We wouldn't bother bringing this topic up except for the fact that in the early 1930s it would consume the attention of several archaeologists working in the lower Mississippi River valley, in particular Frank M. Setzler and James A. Ford. Moorehead, never one to pass up an opportunity to engage in fanciful flights of fantasy, believed that southern-Ohio Hopewell peoples originated in eastern Iowa and at some point migrated eastward. On reaching the Scioto River valley, "where conditions were extremely favorable for their development, they remained, became sedentary, and attained the culmination of their wonderful development" (Moorehead 1929b:77). He indicated that trade items found at Ohio Hopewell sites were evidence that the Hopewellians had a knowledge of the South, but his objection to a southern point of origin of Hopewell was that the Ohio mounds did not contain the kind of ceramic art that was so prominent in the South. Moorehead apparently was unfamiliar with Gerard Fowke's (1928) excavations at the Marksville site in Avoyelles Parish, La., where he recovered several vessels similar in form and design to vessels from Ohio Hopewell sites. Ironically, Fowke himself failed to note the similarities, although he had spent considerable time working in Ohio. The similarities, however, would not be lost on Setzler, who in 1933 began a reexamination of the Marksville site. In assessing the resemblances between vessels from Marksville and those from southern Ohio, Setzler (1933a, 1933b)

came down decidedly on a south-to-north migration of Hopewell peoples. Ford, Setzler's field assistant at Marksville, would have more to say on the subject two decades later (Ford *et al.* 1955; Ford and Webb 1956).

In our opinion the most interesting remarks made at the St. Louis meeting were not in a prepared paper but in comments made by Matthew Stirling in his discussion of Hodge's presentation. Stirling received his undergraduate degree from the University of California in 1920 and his master's degree from George Washington University in 1922. He joined the U.S. National Museum in 1921, and in 1928 was named chief of the Bureau of American Ethnology. We focus specifically on two points he made, each of which symbolizes where Americanist archaeology was headed in the late 1920s. First, Stirling (1929a:28) noted that "One cannot be a competent archaeologist without ethnological training. Archaeology is not merely a matter of digging and careful observation, but it requires an ability to interpret these observations accurately." This sentiment was not something that Stirling alone felt but rather was an implicit notion that had been present from the earliest days of Americanist archaeology. In the United States, degrees were not granted in archaeology but in anthropology—a phenomenon that holds true today. Any professional archaeologist in attendance at St. Louis probably would have agreed with Stirling's remarks, having spent several years taking courses in general ethnology as well as courses focused on the ethnology of particular groups or regions. As we discuss elsewhere (e.g., Lyman et al. 1997; O'Brien and Lyman 1998, 1999c), much of what passed as archaeological theory during the culture-history period was grounded in ethnological theory. Thus the archaeological record was viewed in ethnological terms, and it became commonplace to equate such things as artifact assemblages with particular "cultures" (Lyman and O'Brien 1999).

The second point Stirling made was related to the first, and it concerned the tracking of ethnohistorically known groups back in time. Stirling (1929a:25) saw two extremes in archaeology: "On the one hand is the tying up of archaeological research with the historical period concerning which we have definite information, and on the other hand the projecting of it backwards to that period of which we may be able definitely to say that there was no human occupancy of this continent." There was, however, a means of linking these two extremes, and Stirling (1929a:25) laid it out in clear terms for his audience:

It is possible to determine rather definitely the dates of the introduction of certain types of articles of European manufacture which may have been found in an archaeological site. We know when and where certain varieties of trade beads were made; we know rather definitely the period during which certain smoking pipes were manufactured and introduced as trade articles among the Indians, and there are innumerable other examples of the same sort which may aid greatly in giving us something definite from which to project backwards a chronological sequence.

Why, Stirling asked, should an archaeologist be depressed upon discovering a silver ornament or a string of glass beads alongside articles of native origin? To the contrary, "There is no justification for such a reaction, and in most instances the archaeologist should feel rather a sense of elation. Where an association of this sort is discovered it becomes possible by a process of overlapping to carry a native culture throughout its successive stages of development well back into the prehistoric period" (Stirling 1929a:25).

Stirling was advocating what his Smithsonian colleague Waldo Wedel (1938) a decade later would refer to as the *direct historical approach*. No one can legitimately argue with the logic of the approach, which was not new in the 1930s but had been the strategy adopted in the 1880s by John Wesley Powell and Cyrus Thomas (1894) for the Division of Mound Exploration in its quest to destroy the myth that a race of people separate from Native Americans had constructed the thousands of mounds evident across the eastern United States: First, document similarities in cultural materials between those evident from ethnographic and ethnohistorical research and those evident archaeologically. Second, assume similar materials are temporally and phyletically related and construct a continuous thread, or cultural lineage, from the past to the present (Lyman and O'Brien 2000; O'Brien and Lyman 1999a, 1999b). Roland B. Dixon (1913) had espoused just such a strategy in his presidential address to the American Anthropological Association in 1913.

In "An Introduction to Nebraska Archeology," Bureau of American Ethnology archaeologist William Duncan Strong (1935; see also Strong 1936), who received his Ph.D. under Kroeber at the University of California in 1926, noted the importance of the direct historical approach:

It is the firm belief of the author that the possibilities of historic archeology in North America are not fully realized by the majority of anthropologists at the present time.... It seems surprising, therefore, that even today there are archaeologists more interested in segregating obscure early cultures of unknown periods and affiliations than they are in determining the historic cul-

tures and sequences represented in the regions to be worked. Obviously, in such work the historic cultures need not be an end in themselves, but they do seem to represent the threads that give most promise of untangling the complex skein of prehistory. (Strong 1935:296)

There are two critical aspects of the direct historical approach. First, it provides "a fixed datum point to which sequences may be tied" (Steward 1942:337). That is, it provides a chronological anchor in the historical period to which archaeological materials of otherwise unknown relative age can be linked. Second, the more similar prehistoric materials are to the historically documented materials, the more recent they are; conversely, materials that are less similar to historically documented materials come from further back in time. Thus the direct historical approach demands the study of homologous similarity, a point generally unrecognized at the time (Lyman and O'Brien 1997, 2000). Without a chronological anchor, sequences cannot be established, and assemblages of artifacts have the unsavory characteristic of floating in time and thus being of minimal utility in determining the development of historically documented cultures. This is the point Stirling was making in his comments on Hodge's paper, and it was the same point made by Neil Judd, curator of archaeology in the U.S. National Museum, in a paper published in the American Anthropologist that same year. Judd (1929) lamented that archaeologists knew little about the late prehistoric remains of over 200 historically known tribes and that a "relative chronology for each culture area is one of the surpassing needs of archaeology in the United States today" (Judd 1929:418). The second National Research Council-sponsored conference, held in Birmingham, Ala., in December 1932, would address this issue head on (O'Brien and Lyman 1999c, 2001, n.d.).

Concluding Remarks

In closing the St. Louis meeting, Fay-Cooper Cole (1929:112) expressed the feeling that "we will all leave here, much more assured of the future of archaeology than when we came here two days ago." There may have been some reason for such optimism, but it is apparent that the field was still plagued with difficulties. The Committee on State Archaeological Surveys had expended considerable effort to reach out to state societies and museums and to demonstrate the advantages of working toward a common good, but part of the problem resided in the small number of professionals available to guide

the nonprofessionals. With the exception primarily of the University of Chicago and, farther north, the University of Michigan, the Midwest contained no graduate programs with an emphasis in archaeology. Until the 1940s, eastern universities—Yale, Harvard, Columbia, and Pennsylvania—produced the vast majority of doctoral students, and even with that there weren't enough to meet the growing demand for archaeological training at the undergraduate level. Add to that the need to provide counsel and assistance to state and local museums and other organizations, and there was a real manpower shortage. It was no wonder that nonprofessionals looked to whomever they could for assistance, be that person a biologist, as in the case of Arkansas' Samuel C. Dellinger, or an archivist-historian, as in the case of Alabama's Peter A. Brannon. The advice offered by nonprofessional archaeologists, while often earnest, fell short of the mark.

Matthew Stirling understood this, and his closing comments at the conference in St. Louis provided his thoughts on where nonprofessionals could turn for help:

there is one topic on which I might profitably add a few words, and that is something concerning the history and the nature of the institutions which I represent: The Smithsonian Institution and the Bureau of American Ethnology, which is a part of that great institution....

The Bureau of American Ethnology at the present time has, among its duties, not only the pursuit of field work in various parts of the country, but it has also become, in a way, a court of appeal for the population throughout the country who are interested in matters pertaining to anthropology....

.... There is probably no organization in the country that has published as many pages or as many volumes dealing with the American Indian and with the subject of Archaeology as has our Bureau.... We stand ready to assist at any time, to the best of our ability, any of you who are interested or professionally engaged in the study of archaeology. (Stirling 1929b:109–12)

One place where this assistance showed up in a significant way was in Birmingham, Ala., just a few days before Christmas 1932, when the National Research Council sponsored its second regional conference. Although the conference was attended by professional archaeologists from a number of institutions, it was personnel from the Bureau of American Ethnology and its sister institution the U.S. National Museum—individuals who, as Stirling put it, stood "ready to assist at any time"—who had by far the most impact on the group (O'Brien and Lyman 1999c, 2001, n.d.).

In assessing the accomplishments of the Committee on State Archaeological Surveys, which was disbanded in 1937 and its functions assumed by the Society for American Archaeology, one is struck by the parallels between Americanist archaeology in the 1920s and Americanist archaeology today. The destruction of sites did not abate after 1929, and those in the discipline today, both professionals and nonprofessionals, are as concerned with the problem as their forebears were. Much of the destruction is attributable to such things as road construction, urban sprawl, and the like, but part of it comes from indiscriminate digging by people who have no business putting a shovel in the ground. Sometimes such digging is driven by monetary gain, although the enactment of state laws regarding the desecration of human burials has curtailed this to a degree, but we would guess in the majority of cases it is driven simply by curiosity or a professed "love of the past." This might be an excellent quality to have, but one has to be careful of how it is manifest. Too often, curiosity and devotion, no matter how lovingly applied, are fatal to the patient. Clark Wissler, Carl Guthe, and other professional archaeologists knew this, and they enlisted the aid of knowledgeable nonprofessionals to channel the energies of avocational archaeologists into activities that worked for preservation rather than against it. They never told nonprofessionals, "Don't dig"; they told them, "If you must dig, seek the advice and assistance of someone who knows more than you about how to do it correctly." Or, in an emergency, read the guide leaflet, which we reprint in the appendix, and follow it assiduously. That advice still applies over 70 years later.

Notes

- ¹ Missouri Historical Society minutes for June 17, 1880, page 2. Missouri Historical Society Archives, St. Louis.
- ²Archaeological Institute of America Archives (Vol. I:23), Missouri Historical Society Archives, St. Louis.
- ³ Letter from Clark Wissler to C. E. Seashore, March 20, 1922. National Research Council Archives, Committee on State Archaeological Surveys, Washington, D.C.
- ⁴ Letter dated October 25, 1921. National Research Council Archives, Committee on State Archaeological Surveys, Washington, D.C.

- ⁵ Memorandum of November 7, 1921, from Clark Wissler to the Committee on State Archaeological Surveys, reporting on a joint letter from R. J. Terry and C. H. Danforth of the Anthropological Society of St. Louis. National Research Council Archives, Committee on State Archaeological Surveys, Washington, D.C.
- ⁶ "Report of the Chairman on a Trip through the Mississippi Valley, September, 1928," unsigned but written by Carl E. Guthe. National Research Council Archives, Committee on State Archaeological Surveys, Washington, D.C.
- ⁷ Letter dated March 20, 1922. National Research Council Archives, Committee on State Archaeological Surveys, Washington, D.C.
- ⁸ Kidder served simultaneously as chairman of the CSAS and chairman of the Division of Anthropology and Psychology for the period July 1, 1926–June 30, 1927.
- ⁹ "Report of the Chairman on a Trip through the Mississippi Valley, September, 1928," unsigned but written by Carl E. Guthe. National Research Council Archives, Committee on State Archaeological Surveys, Washington, D.C.
- ¹⁰ Letter dated April 11, 1928. National Research Council Archives, Committee on State Archaeological Surveys, Washington, D.C.

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Appendix: Guide Leaflet for Amateur Archaeologists

The guide leaflet produced and distributed by the National Research Council's Committee on State Archaeological Surveys in 1930 was adapted from an earlier leaflet on the aims and methods of statewide surveys that was distributed in 1923. The committee modified the pamphlet, added line drawings, and reissued it in 1930. We reproduce the leaflet (following this page) in its original layout and with original pagination. We standardized punctuation and corrected a few typographical errors but otherwise made no changes to the text.

Number 93

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REPRINT AND CIRCULAR SERIES OF THE National Research Council

Guide Leaflet for Amateur Archaeologists

Issued under the auspices of the Committee on State Archaeological Surveys

Division of Anthropology and Psychology National Research Council

NATIONAL RESEARCH COUNCIL Washington, D.C. 1930

Guide Leaflet for Amateur Archaeologists

IN 1920 the National Research Council organized the Committee on State Archaeological Surveys to encourage systematic study of the fast-vanishing Indian remains. In the ten years of its existence the committee has assisted in the formation of research organizations in various states, has sought to systematize and unify methods of investigation, and through publications, conferences and visits of its Chairman, has endeavored to keep all workers in the field informed of the progress of archaeological research throughout the United States.

The activities of the committee have been purely advisory. It has not sought to control the actions of any group or State, but has freely offered its help and advice in the advancement of scientific work. It now seeks to extend its services to amateur archaeologists and to all who are interested in the early history of our country. In presenting this booklet, the committee hopes to enlist the active cooperation of all intelligent laymen in the preservation of archaeological sites. It seeks to give information which will enable the local investigator to carry on work according to the most approved methods, so that he may assist in unravelling the story of human development on the American continent.

It is evident to everyone that the great majority of our Indian remains have already been destroyed. This has been due in part to the fact that many prehistoric sites have been occupied by white settlers who have found it necessary to level Indian mounds and earthworks in order to utilize the land for farm purposes, for city development, or to make way for roads. However, the greatest destruction has been wrought by curio hunters who have dug into the mounds in search of relics, without realizing that they were destroying valuable historical material. To open an archaeological site without knowing how to preserve the record is equal to tearing pages out of a valuable book, a book which can never be re-written.

In each State there are some people who are interested only in securing specimens which they can sell for personal gain. They care nothing for history or science, and are not disturbed by the fact that their ruthless methods destroy materials of great interest to their fellow citizens. This leaflet is not addressed to such. Their activities will only cease when public opinion is strong enough to make their work unprofitable. Today no scientific institution and no well-informed person will purchase archaeological material which is not accompanied by a full record. When intelligent local collectors take the same attitude the work of these com-

mercial "pot hunters" will cease. An Indian relic without data is as worthless as an unidentified postage stamp or bird's egg. The pages which follow seek to show how amateur archaeologists may assist in recovering the pre-history of our country, and at the same time help to preserve the existing Indian sites for future generations.

It is well known that some of our Indian tribes were nomadic. They were wanderers who made their camps near to favorable hunting grounds and who moved to new sites whenever whim or necessity dictated. Other Indian groups were chiefly dependent on agriculture, and these made permanent settlements which were occupied for long periods. But exhaustion of soil, hostile raids, epidemics and other causes led to their abandonment and the establishment of new camps. Thus it sometimes happened that a single camp site was occupied several times, and the record of these periods of occupation can now be read by careful excavation. In some places it is possible to carry back the record through successive stages of development from historic to ancient times. Examples of such stratification are rare and should be noted with the utmost care. Through them we can trace the movements of peoples, the growth of culture, and the effects of environment on man in America.

But such a story cannot be obtained by the careless digger, or by those who are interested only in beautiful specimens. It can only be revealed by those who preserve every evidence of this early life. Every potsherd, every implement of bone or stone, no matter how crude or fragmentary, every animal bone or vegetable product, becomes an important part of the record. Nothing should be discarded until it has been made the subject of careful study. Even the scattered surface finds have great value if their location is recorded, for when their distribution is plotted on a map they tell of migrations, of trade routes and of local development.

In some places the Indians built great earthworks, fortresses and pyramids. In others they constructed mounds of earth in the form of birds and animals—the so-called effigy mounds. In some localities they buried their dead in graves dug in the earth or surrounded them with stone slabs. In other places they placed the corpses on the surface and raised over them mounds of earth, some of considerable size; still others constructed mounds in which they placed the dead. Many different methods of preparing the body were employed. Sometimes it was laid out full length on its back. Again it was placed on its side with hands and feet drawn close up to the body. In some instances cremation was practiced, while still other groups placed the dead on platforms until the flesh had vanished, then tied the bones into bundles and placed them in the mounds. All these methods are of extreme interest to the student, and

the record of their presence may go far toward identifying the Indian groups in question.

It not infrequently happened that a mound was originally built by a people practicing one method of burial, but was later used by incoming tribes. Such infrusive burials are most instructive in deciphering the sequence of cultures.

In the Southern, Eastern and far Western States, Indians living near to the sea lived largely on shell fish, and during long periods of occupancy built up great refuse piles in which are found animal bones, broken bits of pottery and other objects which help to reveal the life and habits of the builders.

Cave dwellings are for the most part restricted to the Southwestern part of the United States, yet important sites have been discovered in the Mississippi Valley and elsewhere.

Within recent years reports of finds of early man have been current. These range from the finding of utensils associated with the bones of animals now extinct, to the discovery of arrowheads and similar objects lying in undisturbed gravels at points where river erosion or excavation has exposed successive strata. Still other important sites are ancient mines and quarries from which the Indians obtained their flint and in some cases copper.

HOW TO OBTAIN THE RECORD

No single collector can hope to obtain a representative exhibit from the whole country, nor would such a collection be desirable, for upon the death of the owner it is almost certain to be scattered and its scientific value lost. However, each local archaeologist can become a specialist in his own locality. He can gather the most accurately recorded collection from that area. He can obtain information which when added to that of his fellow workers will ultimately reveal the pre-history of America, and he can have the satisfaction of knowing that he has assisted in preserving prehistoric monuments for future generations.

The survey.

In many sections of the country it is possible to obtain plat books which give locations of farms, roads, lakes and other features which may serve as guides in the field. If these are not obtainable, township or section maps may be used, but here it is necessary to transfer from county maps, streams, roads and other information by which it is possible definitely to locate a site. On such a map first place all existing Indian sites, then those whose former existence can be definitely determined, and

finally the approximate location of doubtful sites. In order that all work may be uniform, the symbols shown in Figure 1 are suggested.

Indian trails which can be located from old land surveys, maps, or county histories should be drawn in with blue pencil, but only so far as they can be definitely and accurately identified.

	Now Existing	Formerly Existing Definitely Located	Reported
Round or conical mound		\otimes	?
Elongated or elliptical mound		\bigotimes	?
Effigy mound	\Leftrightarrow	*****	<u>₹</u>
Village site	\triangle	\triangle	<u>^</u>
Earthwork or fortification			?
Quarry	☆		4
Burial ground (not a mound)	+ +		
Rock shelter or cave showing human occupancy			

Figure 1

Should there be several mounds so close together as to make it impossible to place them on the map, this can be indicated by placing a number at the lower right-hand side, as, for eight circular mounds: O_8 . If further identification becomes necessary in describing, letters can be placed above the figures, as $O_8^{\underline{\Lambda}}$.

For describing particular sites, squared paper should be used, and the exact location and size of each mound should be noted. Thus each square might be considered as five feet, and the group of mounds $O_{8}^{\frac{\Lambda}{8}}$ might be shown as in Figure 2.

In such a case the use of a tape and compass is necessary to place the mounds in their exact relationship to one another.

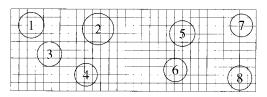


Figure 2

Surface collecting.

When mapping the Indian remains in a township, it is desirable to make surface collections, and to locate the material with relation to the nearest mound, village site, and so on. Such surface material should be carefully numbered and entered in the catalogue. Never depend on your memory alone for locating specimens.

Village and camp sites are often located by the profusion of broken pieces of pottery on the surface. Black earth containing charcoal and burned animal bones is also a good indication of former occupation. In places, low circular mounds reveal the foundations of wigwams, while low mounds with central depressions may be the remains of earth lodges.

Survey of collections.

In nearly every section of the country private collectors will be found. These may be farmers who have preserved only the specimens found on their property, or they may be those who have collected materials from several townships. In all cases where the owners have any knowledge of the locality from which their collections came, it is desirable to make a record of their specimens. For this purpose it is not necessary to draw in or photograph every piece. First of all, separate the arrowheads into *classes*.







Figure 3

Then with a lead pencil trace in the outline of one of each class, and state the number of such pieces in the collection. Or place one of each type on a suitable background, photograph them, and indicate the number of each. Thus, if three classes of arrowheads are found they might be indicated as in Figure 3.

A similar method should be followed for stone axes, hammer stones, and so on. It is desirable to photograph pottery, but if this is impossible, make drawings, and always indicate the style of decoration if any is present. Also state if the pottery is sand or shell tempered. Pictures and descriptions of potsherds are also desired. With such information it will ultimately be possible to learn the distribution of type utensils. Local archaeologists can render service of great value if they will obtain the data indicated and make them available to the Committee on State Archaeological Surveys, or to the local institution whose name appears on the last page of this leaflet.

Excavation.

Every amateur who desires to carry on excavation should first of all receive instruction from a trained archaeologist. The ability to see the record in the ground frequently depends on training and experience. A beginner, with the best of intentions and with every attempt at care, will often miss stratification lines, or fail to recognize the difference between disturbed and undisturbed deposits.

Your State University or Museum, any member of the Committee on State Archaeological Surveys of the National Research Council, and particularly the institution furnishing these instructions will gladly assist you. You are urged not to excavate without this instruction unless it becomes necessary to save the record of a site which is about to be destroyed. In such a case, the following methods should be followed (the letters refer to the points and lines so designated on Figure 4):

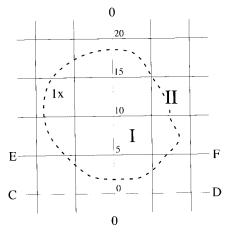


Figure 4

Run a line across the north and south axis of the mound, as line 0—0. Five feet to the east run another line parallel to 0—0, and continue these five-foot lines until you are well outside the mound. Now, do the same on the west side of 0—0. Then, beginning on the south, well outside the mound, run an east and west line C—D. Five feet to the north run another such line, E—F, and continue this procedure until you have gone beyond the northern limits of the mound. Now place stakes at each point of intersection of the lines, and your whole site will be divided into five-foot squares. Before starting work you should make a map of the squares, such as Figure 4. Along the line C—D sink a trench to a depth of about 2 feet below the surface or disturbed soil. Now carry this trench forward much as you would cut a loaf of bread. Always keep a straight face to the cut, throwing the dirt behind you so as to leave an open space.

As you enter the mound, you may find evidence of a prepared or hardbeaten floor, or of the undisturbed ground upon which the mound was erected. You should be constantly on the watch for fire lines or evidences that the mound was built in two or more different periods. If the primary mound stood for years, and grass and other materials accumulated on the surface, and then at a later time more earth was heaped upon it, this will probably be indicated by a dark or humus line. All evidences of this character should be carefully noted, and your record should indicate the situation for each square. Likewise, every find of a stone implement, pottery or skeleton should be accurately placed in your plan, and should receive further notice in your field notebook. By following the plan indicated in Figure 4, it is an easy matter to place every object found in its exact place on the map.

Thus such a square as the one marked "I," which begins on the 5-foot line E—F and lies east of the zero line 0—0, can be written: I=5E0 (i.e., it begins on the 5-foot line, east of the zero line), while square II=10E5 (i.e., it begins on the 10-foot line, 5 feet east of zero line). If an object is found at 1x, it can be written in your notebook as 12.5–W-7, which indicates that it lies 12 feet and 5 inches north of the line C—D, and 7 feet west of the line 0—0. You should also note in your book how far below the present surface and how high above the floor of the mound the object lies. Each time an east and west line is encountered, as E—F, you should measure the height of the mound from the floor at each stake. By following such a method, you will have a complete record of the mound, its composition and its contents. In all excavations test pits should be sunk from time to time below the level of your work, to be sure

that you are not overlooking some more ancient site. Village sites and cave deposits should be staked for excavation in like manner.

Utensils.

A pick and shovel can be used for the preliminary trench, but when entering the mound it is necessary to use other tools. A mattock with a short handle can be employed for shaving down the face of the cut from top to bottom, until objects of interest are encountered, when smaller tools, trowels, dull knives, orangewood sticks, whiskbrooms, and smaller brushes become necessary.

Preservation of material.

Never remove a specimen by pulling it out. Always expose the object fully by cutting away material above and on either side of it, and if it appears to be associated with other objects or with a skeleton, allow it to lie in place until all are uncovered and photographed. Pottery, human and animal bones are sometimes so soft when encountered that they cannot be removed without injury, but exposure to the air for a few hours often hardens them considerably. Very fragile bones can be strengthened by spraying them with a very thin solution of shellac. Often it is desirable to cut below a fragile object, and slip in a thin piece of wood or tin, on which it can be removed. When working around bones and similar materials, remove the soil by means of thin knives, orangewood sticks, or by brushes. Any object which is worth uncovering is worth preserving. Unless you are willing to give this time and care to preserving the record, you should not attempt excavation. Preserve all fragments of pottery and bone; they may be capable of restoration later. Each specimen should be numbered and entered in a notebook. Since tags are easily lost, it is wise to mark each specimen with a 6-H (hard) pencil. Then wrap separately in paper and attach tag to this. When many potsherds are found together, they may all be placed in a box and properly labeled. Never place pottery, arrowheads and heavy stone specimens in the same box. Copy all your notebooks, drawings and pictures in duplicate, and send one copy to your local institution or to the State Archaeological Surveys Committee for interpretation and safekeeping. Your interests will be protected and you will be given full credit for any information used.

Mention has been made of the possibility of finding evidences of early man in places where excavations or stream cutting is exposing the strata of the rock. In all such localities the face of the cut should be carefully studied and if human bones or stone utensils are found at considerable depths or associated with extinct animals,

your state institution or the Committee on State Archaeological Surveys should be notified at once.

Last but not least, every collector should make provision for the care and disposition of his collection in case of his death. The amateur collector has made himself custodian of information of great historical interest and he should guard it against loss or scattering.

The foregoing instructions are far from complete, especially the pages dealing with excavations. Opening a prehistoric site is a task which should only be undertaken in an emergency. Use your influence to preserve all mounds and village sites until you can have assistance or advice from a trained archaeologist. The Committee on State Archaeological Surveys and your local organization is anxious to aid you in recovering and preserving the story of man in America.