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Article Summary: Frederick Henderson Sterns (1887-1951) was a pioneer in the study of Plains prehistory, in many ways ahead of his time in developing the scientifically-oriented archeology we take for granted today. He is noteworthy for his general problem-oriented research strategy, his method of interpreting the structural form of earth lodges, his use of stratigraphic data in individual site analyses, as well as the reconstruction of regional culture-history, and for his interest in settlement patterns and their possible social interactional correlates.

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Photographs / Images: Fred H Sterns, 1908; Professor John L Champe at the Walker Gilmore Site in 1946; Fred Sterns exploring Exposure VII at Walker Gilmore Site; Diagram adapted from "Nebraska's Three Decker Prehistoric Towns," from the St Louis Post Dispatch, October 18, 1914; Survey party at Sterns Creek, 1948: Walter Sehnert, Dr George Gilmore, Alvin Wolfe, Mary Lou Callen Freed, E Mott Davis, Fred Sterns, George Metcalf

FRED H. STERNS: A PIONEER IN THE PURSUIT OF PLAINS PREHISTORY

By David M. Gradwohl

Now and then there are individuals who, by virtue of their innovative work, are said to be living "ahead of their times." The early work of Frederick Henderson Sterns represents the efforts of a person who was not only a pioneer in the study of Plains prehistory but in many ways ahead of his times in the scientifically oriented archeology we take for granted today. Of particular note in Sterns' work were his general problem-oriented research strategy, his method of interpreting the structural form of earth lodges, his use of stratigraphic data in individual site analyses, as well as the reconstruction of regional culture-history, and his interest in settlement patterns and their possible social interactional correlates.^{1,2}

Although Sterns' substantive contributions to Plains archeology have been heavily drawn upon and cited in various studies,³ the actual impact of his work is perhaps not appreciated fully today because Sterns shifted roles shortly after obtaining his Ph.D. in anthropology and spent the majority of his professional life as a population statistician. At the time of his death in 1951, however, Sterns' obituaries acknowledged both professional pursuits and mentioned his interests in Plains Indians. One newspaper article identified him as an "anthropologist and retired statistician in charge of population studies for the American Telephone and Telegraph Company."⁴ Another obituary noted that Sterns "was a pioneer in the techniques of population studies relating to industrial and economic surveys" and also "an authority on the Plains Indians of Nebraska."⁵ Although there were indeed some other workers whose antecedent studies and publications Sterns himself acknowledged,⁶ Sterns was one of the first professionally trained anthropologists directly involved in central Plains archeology.

Retrospective reflection on the archeological work of Fred H. Sterns is especially germane today when battles still rage between

persons whose concepts are identified as the "new" archeology as opposed to those whose ideas are labelled as the "old" archeology. In looking back at another person's work, one must be careful not to "read in" or project back ideas and motivations which are demonstrably part of the thinking of one's own times. On the other hand, it is a mistake not to understand clearly the nature of antecedent work and to recognize incisive ideas which initially stand out against their own contemporary context and then are subsequently re-integrated as the times "catch up." The purpose of this paper, therefore, is to emphasize Sterns' conceptual contributions to Plains archeology. This discussion also makes note, as previous studies have done, of Sterns' substantive contributions to the outlines of regional prehistory. These scholarly efforts will be framed against some perspectives of Fred H. Sterns, the man.

Born in Brooklyn, New York, on August 12, 1887, Fred H. Sterns was raised in Benson, Nebraska. His father, S.H. Sterns, served as a bookkeeper for John A. Creighton, noted Omaha philanthropist, founder of the Union Stock Yards Company and Count of the Papal Court of Rome. The elder Sterns' vocation perhaps influenced his son's pursuits, because mathematics was a particular focus of Fred H. Sterns' interests at Omaha Central High School, from which he graduated in 1904. A newspaper article recounting Sterns' accomplishments noted his apparent academic precociousness in high school: "Classmates of Mr. Sterns say they always felt that he should have been instructor instead of instructed."⁷ According to another newspaper article, Sterns' interest in Plains archeology began while he was still in high school: "Hunting for the treasured relics hidden deep in the soil of hills to the southeast of Omaha has always been his chief hobby, since Dr. Gilder communicated his own interest in the same subject to him when a student at Central High School."⁸

Following his graduation from high school, Sterns worked in business, including a sorghum factory, for two years and then enrolled at Oberlin College in Ohio. He completed four years of course work in three years and was graduated from Oberlin in 1909. In college Sterns specialized in geology, psychology, and philosophy. His outstanding academic performance resulted in his initiation into Phi Beta Kappa and apparently earned him the moniker "the college philosopher."⁹

Sterns returned to Nebraska after graduation from Oberlin and served as an instructor in geology and psychology at the



Fred H. Sterns, 1908.

University of Omaha for two years. Eventually Sterns resigned from his position at the university when, as he put it: "It became evident that geology did not meet the requirements of their Genesis."¹⁰ One research project which Sterns pursued while at the university, however, was a geological survey of Douglas and Sarpy counties. His efforts were specifically oriented towards understanding the nature of the local loess formations and the possible processes by which these massive deposits were formed. It was during this time that Sterns became particularly involved in the archeological investigations being conducted by Robert F. Gilder.¹¹ On the basis of Gilder's tutelage, a far-sighted Omaha businessman, and some timely financial support from F.W. Putnam of the Peabody Museum of Archaeology and Ethnology at Harvard University, Sterns set out on a short but stellar stint in anthropology.

In 1909 the Omaha Commercial Club, aware of the potential richness of archeological sites in the Missouri River Valley, as evidenced by the finds of Gilder and others, endeavored to attract professional archeologists to conduct intensive investigations in the region. On March 16, 1909, W.R. Wood, secretary of the Omaha Commercial Club, sent a letter to F.W. Putnam, curator of anthropology at the Peabody Museum of Harvard University, inviting an archeological field party from that institution to explore the Omaha vicinity. Putnam forwarded the

letter to the editor of the *American Anthropologist* and praised the Omaha Commercial Club for its "high and liberal spirit which we can all appreciate in contrast to the narrow spirit shown in some places in trying to prevent exploration by any one not a resident of the state."¹² This letter was published in the *Anthropologist* with the following editorial comment: "We are glad to say that the latter communication reflects a very different spirit from that recently exhibited by a Nebraska congressman in remarks to the House of Representatives to the effect that the national government is wasting time and money on ethnological and archeological investigations."¹³ One can understand the enthusiasm of Putnam and the *American Anthropologist* in reading the provocative and forward-looking letter from the Omaha businessmen:¹⁴

Curator
Department of Anthropology
Peabody Museum, Cambridge, Mass.

Omaha, March 16, 1909

Dear Sir:

The Omaha Commercial Club invites your department, when making up its field parties, to bear in mind the almost unexplored archeologic region of which this city is the geographical center. As is well known to you, the famous Nebraska Man was discovered a few miles north of Omaha in this county. The whole valley of the Missouri River is a veritable treasurehouse for the archeologist. There are unnumbered tumuli and hundreds of large circular house ruins scattered over the bluffs near the river which exploration shows differ materially from the type of dwelling used by the Omaha, Oto, and Pawnee Indians when Nebraska was visited by Lewis and Clark. Associated with these ruins are refuse heaps and tumuli. Several types of skeletal remains and many methods of interment indicate many different peoples, and in the matter of artifacts the range probably exceeds that of any other section. Besides the more common stone objects are the more interesting implements of bone, horn, antler, and shell, which include many new forms, while the variation of pottery is almost limitless.

Desiring in a thoroughly scientific spirit to encourage the study of Nebraska's earliest people, the Omaha Commercial Club takes this means of calling your attention to this splendid field in the geographical center of the United States. Expeditions to this section will find convenient electric lines to convey them to their point of labor in a few minutes. The cost of living and transportation it will be shown on inquiry of the Omaha Commercial Club are nominal, and climatic conditions here are altogether desirable.

In extending this invitation, it can be stated that the Omaha Commercial Club has the hearty cooperation of Mr. Robert F. Gilder of this city, with whose work as an archeologist you may be familiar and we trust you may look upon it with favor.

Respectfully yours,
The Commercial Club of Omaha
By W.R. Wood, Secretary

At Gilder's urging and in response to the published letter from the Omaha Commercial Club, Sterns wrote to Putnam in September, 1911, inquiring if "some arrangements might be made with your museum whereby I could serve as your

representative in field work in this region or in some other if you cannot put a man here." Sterns' communication was accompanied by a letter of reference from Gilder.¹⁵ Frances H. Mead, Peabody Museum secretary, acknowledged Sterns' letter but advised him that Putnam was on vacation and would have to answer the request personally at a later date. Several months later Sterns again wrote to Putnam seeking a response to his inquiry. Sterns stressed the extensive distribution of archeological sites in eastern Nebraska, their heterogeneous nature, their considerable age, their relatively good state of preservation, and their availability for investigation. His letter, in part, exclaimed:¹⁶

I cannot make too strong the uniqueness of the Nebraska field. Nebraska's primitive inhabitants have left records of their life, more complete than perhaps those of any other region. Elsewhere the only sources of information are the burial mound and the occasional upturnings of the plow. Here, on the other hand, we not only have these, and in addition crematories, flint quarries, shop-sites and rubbish heaps; but we have also the ruins of complete houses in which the people lived instead of burying their remains. The experienced eye can easily detect these ruins so that it is only a matter of four feet of earth to be in the homes of these ancient peoples. The "floor" and the caches under it contain all the articles of their civilization which can withstand the forces making for decay. These include all objects of pottery, bone, antler, shell, flint, stone. Charring, too, has preserved some objects of other materials.

Sterns' letter went on to convey a sense of emergency in investigating the sites:¹⁷

I am making as strong an appeal as I know how for the immediate assumption of this work as this time is more favorable than any time in the future will be. Tho now there are nearly a thousand unworked house-sites within forty miles of Omaha, they are being destroyed in large numbers. Our rapidly growing metropolis is putting many of them safely under concrete pavements or steel sky scrapers or is grading them into brick-kilns. Away from the city deliberate attempts to fill up these "circles" or frequent ploughing is destroying all traces of many of them. Also when they have been once covered by orchards, it is next to impossible to obtain the owner's permission to work them. The worst difficulty is that boys and other irresponsibles and unscientific workers are beginning to excavate them for the "relics" they contain. My own opinion is that it is a disgrace to American science if they cannot take up this work in earnest instead of leaving to the spare hours of the few genuine workers in the field.

One cannot refrain from pointing out that Sterns' observations were most astute ones for 1911—decades before environmental protection policies, salvage archeology, and other mitigative programs. Unfortunately many archeological sites have been destroyed and still are being demolished by metropolitan expansion and other construction activities in eastern Nebraska. Although the resources for meeting these exigencies are far more available today, Sterns' words have an uncanny relevance in the 1970's.

It is not surprising that Putnam found Sterns' letter persuasive. He quickly made arrangements for Sterns to begin his investigations. In letters written on December 6 and 23, Putnam authorized Sterns to represent the Peabody Museum's interests in the proposed project and assured an initial stipend of \$200 to defray the costs of the investigation. The chilly Nebraska winter weather did not cool Sterns' enthusiasm for the research. He began his excavations on January 9, 1912.

Between 1912 and 1915 Sterns conducted an extensive archeological investigative program in the Missouri River Valley under the auspices of the Peabody Museum. Sterns acknowledged the assistance of Gilder and many local collectors in facilitating his reconnaissance survey and location of sites—particularly Nebraska residents S.P. Hughes (Howe), C.L. Meek (Peru), Dr. G.H. Gilmore (Murray), Alvin McReynolds (Nehawka), W.H. Woods (Calhoun), J.F. Coupe (Walhill), and Mark E. Zimmerman from White Cloud, Kansas.¹⁸ Most of his excavations were located in Nebraska in Sarpy, Douglas, and Cass counties. Other investigations were carried out in Thurston, Burt, Washington, Otoe, Lancaster, Nemaha, and Richardson counties. In addition, Sterns explored several sites in Brown and Doniphan counties in Kansas and in Pottawattamie County, Iowa. In all, Sterns excavated 27 earth lodges, examined a number of other sites, discovered the important stratification at the Walker Gilmore Site, and suggested a provisional sequence of prehistoric occupations in eastern Nebraska. All of Sterns' records, field notebooks, and artifacts were deposited and are still housed at the Peabody Museum. Sterns reported the results of his work in two published papers¹⁹ and his unpublished dissertation.²⁰ Sterns' fieldwork was the basis for a subsequent published paper discussing the peopling of the Great Plains.²¹

As mentioned above, Sterns began his excavations on January 9, 1912, and resolved to work continuously despite the inhospitable season—a phenomenon which all Nebraskans expect contrary to claims by the Commercial Club of Omaha! Sterns called a temporary halt to his excavations in late January when the temperature dropped to twenty-seven degrees below zero and the frost-bound soil extended to eighteen inches below the ground surface.²² A few blizzards slowed down work at other times, but Sterns kept going. By July different difficulties had to be faced. Sterns began a letter to Putnam as follows:

This is a beastly day—hot with a wind that burns everything it touches, but—I have succeeded in putting in six hours work and hope for a couple more toward evening. Such is the advantage of the present site (L-3 as I call it). I have moved out on the Latenser farm, 2 1/2 miles N.W. of Florence, Nebr. I will live on the farm—and so will continue to gain the advantage of using the favorable parts of the day for excavating and the warmer parts for preparing my report, cleaning and packing specimens, working on my map etc.²³

In August other conditions plagued Sterns' excavations as indicated in another letter to Putnam:

The night before last we had the worst storms for years. When I finally did have the courage to visit my trenches about yesterday noon, I found an awful mess. At least a foot of mud was in the bottom of my ditch and another foot of water still there. The fireplace which I had carefully preserved in order to get a section, was destroyed. My wall in front had deep gorges cut in it and had caved in in several places. Even some of my stakes were washed out. To make matters worse, there was another severe rain last night.²⁴

The letter continued, however, in Sterns' typical enthusiastic manner: he described some complete ceramic vessels, discussed his documentation techniques, and described extensively his evolving concept of the prehistoric settlement pattern he was discovering. Suffice it to say that Sterns' notebooks and his letters to Putnam reflect a dedicated and hard-working person throughout the rigors of difficult field conditions in Plains archeology.

The quality of Sterns' work is perhaps even better indicated in several statements from other contemporary sources. An article in the *Omaha World Herald* reviewing the 1912 discoveries commented that "to one acquainted with Sterns the amount of work he accomplished within a few months and the completeness of his data and reports seem incredible. But the fact is that what he accomplished almost entirely alone is seldom exceeded by a fully equipped expedition of a half dozen men with as many laborers."²⁵ Later that year the *Boston Herald* hailed Sterns' investigations along the Missouri River Valley as "the first systematic and entirely scientific investigations ever made in that vicinity" and referred to the project as "one of the most important expeditions undertaken in North America by the Peabody Museum."²⁶

In an article published in 1913 in *Records of the Past* Gilder continued the accolade of Sterns' work:

Devoting his entire attention to exploration Mr. Sterns was able to perform an amount of excavation which, so far as I have learned, is unprecedented in extent by one man. . . . His field notes, maps, reports, measurements, photographs, drawings, etc. are more accurate and detailed than any which have heretofore come under my notice. From time to time, when opportunity offered, I visited Mr. Sterns' work and was much pleased with his method.²⁷

The fact that Sterns reciprocated a recognition of Gilder's contributions is not only evidenced in his citation and acknowledgement of Gilder's work²⁸ but is also reflected in his use of the terms "Gilderites" and "Gilderite Culture" in several letters to Putnam in 1912.²⁹ As far as the present writer knows, however, neither Sterns nor any of his contemporaries used the term "Gilderite Culture" in print. In his dissertation Sterns, of course, used the term "rectangular earth lodge culture." Gilder later coined the term "Nebraska Culture" for this manifestation.³⁰

Sterns' work has stood up well against the test of time. Although the main summary of his investigations unfortunately remained as an unpublished dissertation, the work was extensively studied and summarized by William Duncan Strong in the early 1930's. In his *Introduction to Nebraska Archaeology*, completed in 1932 but not published until 1935, Strong profusely acknowledged Sterns' efforts³¹ and reviewed in detail the data on the Walker Gilmore site³² and the Nebraska Culture sites.³³ Noting that the intermittent stream cutting through the Walker Gilmore site was "now called 'Sterns Creek' by various local archaeologists,"³⁴ Strong designated the Woodland component at this site the Sterns Creek Culture.³⁵ In the terminology of the Midwestern Taxonomic System both Wedel³⁶ and Strong³⁷ employed the label "Sterns Creek Focus" for this manifestation. Most of the many subsequent discussions of and references to Sterns' work have been on the basis of Strong's summary. Champe³⁸ acknowledged extensive use of Sterns' unpublished dissertation and field notes in addition to the data summarized by Strong. Sterns' artifact collections and unpublished materials have also been used in studies by Wedel,³⁹ Gunnerson,⁴⁰ and Gradwohl.⁴¹ Probably all subsequent workers would agree with Strong's statement that "from the strictly scientific standpoint Sterns' various reports stand preeminent in the field of Nebraska archaeology."⁴²

In contrast to Sterns' patently scientific approach and relatively cautious interpretations of his finds, many newspapers sensationalized his discoveries. These images of Plains archeology as portrayed by the news media provide an interesting perspective on one manner in which Americans perceived archeology in the early 20th century. Selected newspaper headlines from this period demonstrate this point:

*Was Nebraska Inhabited in Days When Belshazzar Feasted in Ancient Babylon? Harvard University Planning to Send an Archaeological Party to Spend Two Years Investigating Among the Ruins of What are Believed to be a Primordial Race Which Resided in the Missouri Valley. Evidences of Such a Race Have been Found Extending from North of Omaha to Kansas City.*⁴³ . . . *Did Ancient Mexicans Overrun Missouri Valley?*⁴⁴ . . . *Studying a Vanished Race: Expeditions From Harvard and Nebraska Universities at Work Near Omaha On Houses Left By an Unknown People.*⁴⁵ . . . *Prehistoric Sites Will Be Searched: Evidences of Civilization Ante-dating Indians Found Along the Missouri. Harvard Men Will Explore the Ruined Cities of Strange Race.*⁴⁶ . . . *Harvard Discoveries on Missouri River: Ruins of Pre-historic City, Extending 150 Miles From Sioux City to Kansas City, Unearthed by Explorers—Mystery as to Fate of Millions of Inhabitants, Who Seem to have Walked From Dwellings Leaving Fires Burning, and Weapons in Armories and Never Returned—Explorers Startled at Finding Carved Head with Egyptian Features and Headdress Like That of Sphinx.*⁴⁷ . . . *Find Evidence of Prehistoric Lipstick: Excavations Near Omaha Reveal Relics of Age When Manhood Was in Bloom With Rouge, Lipstick, etc.*⁴⁸

Predictably, the texts of most of these articles were as lurid and inaccurate as their headlines.

Well into the fieldwork during 1912 Sterns decided he wanted to pursue graduate work in anthropology. He wrote to Putnam and inquired about the possibility of obtaining funds to attend Harvard University.⁴⁹ In July, Putnam responded by informing Sterns that he had been awarded the Hemenway Fellowship of American Archaeology and Ethnology for \$550.⁵⁰ Sterns began his graduate work in September. For the next three years Sterns spent long summer seasons in the field along the Missouri River Valley. During the winter months he returned to Harvard for course work and laboratory analysis of his collections. During this period Sterns was appointed an Associate in Anthropology at the Peabody Museum. Putnam provided Sterns with a letter of introduction which read:

This is to certify that the bearer of this letter, Dr. Frederick H. Sterns, Associate in Anthropology at the Peabody Museum of Harvard University, is an authorized representative of this Museum for archaeological research in the states bordering on the Missouri River.

Any courtesies extended in connection with this work will be highly appreciated by the officers of the Museum. Any specimen given to Dr. Sterns will be gratefully acknowledged, labelled with the name of the person making the gift, and carefully preserved for all time.⁵¹

While at Harvard Sterns had the opportunity to interact with some of the luminary anthropologists of his day. In addition to his association with Putnam, Sterns' work was assisted and supervised by Roland B. Dixon who served as his dissertation supervisor. Other members of Sterns' dissertation committee were E.A. Hooton, A. M. Tozzer, Charles R. Lanman and George Chase. In his dissertation Sterns also acknowledged the

assistance of A. V. Kidder, W. C. Farabee, C. C. Willoughby and S. J. Guernsey.⁵² In 1915 Sterns completed his dissertation, "The Archaeology of Eastern Nebraska With Special Reference to the Culture of the Rectangular Earth Lodges," and he received his Ph.D. in anthropology that same year. The dissertation and its impact on Plains archeology have been discussed above and need not be dealt with further here except for the present writer's observation that the work might still be profitably published both in terms of its substantive data and its historical interest to those working in the Plains today.

As stated above, Sterns published two papers in the *American Anthropologist* while at Harvard.⁵³ He also completed a manuscript entitled "The Coming of the Siouan Tribes into Eastern Nebraska." This manuscript was sent to Addison E. Sheldon of the Nebraska State Historical Society on June 6, 1915. The paper is still in the files at the Society and, insofar as the present writer knows, was never published. Sterns indicated in this manuscript that he was planning two additional papers: "In a future paper, I hope to describe in full the archeology of the Kansa and their predecessors in the same region. . . . Archeology shows that there were at least two peoples who preceded them in the region. One of these has been briefly described in a previous paper and a full description of both will be published later."⁵⁴ Apparently neither of these papers was subsequently completed or published.

Sterns remained at Harvard University for another two years after obtaining his Ph.D. His work during this period, however, was not primarily in Central Plains archeology. During the summer of 1917, he conducted an archeological survey along the Arkansas River.⁵⁵ Sterns apparently never published the results of this project nor has the present writer been able to find published references to the survey. Rather curiously, no mention of Sterns' survey is made in Warren K. Moorehead's summary of Arkansas River Valley archeology published in 1931.⁵⁶

During this time Sterns was compiling information pertaining to women who were participating in or accompanying scientific expeditions. In an unpublished manuscript later deposited at the library of the Peabody Museum,⁵⁷ Sterns listed women on expeditions sponsored by the Andover Academy Museum, Peabody Museum, American Museum of Natural History, University of Pennsylvania Field Museum, University of

California, University of Nebraska, Bureau of American Ethnology, Carnegie Museum of Pittsburgh, Geographical Society of Philadelphia, Carnegie Institution of Washington, and several European institutions. As such, the manuscript is perhaps of limited value, but it might provide a helpful start for some scholar wishing to explore and critically analyze the participation of women in early 20th century scientific expeditions. Interestingly enough, Sterns did not list his own wife, Helen Irene Brickett Sterns, whom he married in July, 1917, and then took immediately to the field to assist in the Arkansas River Valley archeological survey. Mrs. Sterns, however, has elaborated on the matter as follows:

The spring of 1917 he had the chance to go on a reconnaissance of the Arkansas River and its tributaries to scout for ancient Indian ruins and traces of Indian civilizations. He suggested we be married at the end of my school year, and that I go along as his cook on the expedition. He himself went in May, after having bought a Ford and having it equipped for camping out. In July he returned East to be married—July 5, 1917.

As I was totally unfamiliar with life on an Anthropological Expedition, many of the methods my husband used to find artifacts seemed like magic to me. He would inquire of the farmers if there were any buffalo wallows on their farms. If so, could he look around in that vicinity. Or he would stand at the top of a hill overlooking a big cornfield. If the color of the cornstalks differed in a certain area, he could be pretty sure that the ashes of an ancient Indian camping place or village were responsible, and again he would ask permission to investigate. In every area he questioned doctors, old inhabitants, farmers, geology teachers, or if there were any kind of a Museum we always went there to see if they had any Indian arrowheads, and to question the man in charge about any Indian "finds" in the vicinity.⁵⁸

Thus Mrs. Sterns joined the ranks, at least temporarily, of those often unsung heroines who have been known to endure the most inconvenient if not uncomfortable of field conditions while their husbands "magically" ply their trade!

While at Harvard, Sterns served as assistant editor to Oric Bates on the Harvard African Studies project and published at least three articles on archeological and ethnographic materials in the Peabody Museum collections.⁵⁹ During this time he prepared for field work in Somaliland, but the expedition was cancelled due to the progress of World War I.

As already mentioned, one of Sterns' main contributions to Plains archeology was his excavation and description of the rectangular earthlodge structures now known to be typical of early Central Plains Tradition sites. The methodological procedures Sterns employed in investigating this problem represent a good critical use of general ethnographic parallels, a willingness to look at newly excavated data with fresh eyes, an

attempt to verify working hypotheses by planned excavation units, and a designing of field techniques to optimally facilitate answering the question being investigated. Such procedures, of course, are the hallmarks of "modern" science and the "new" archeology.

Gilder, it will be recalled, had interpreted the lodge structures as being circular in floor plan.⁶⁰ Employing an ethnographic parallel of historic Mandan earthlodges, Gilder's hypothesis was not entirely unreasonable. Unfortunately this perception was amplified by the fact that the surface depressions of the lodge remains were roughly circular and the fact that Gilder's excavation and recording techniques were less controlled than they might have been.

Initially, based on Gilder's interpretations, Sterns assumed the lodge floors being investigated were circular. However Sterns' excavation of site C-1 at Florence between May and June, 1912, indicated a different form. At first Sterns was cautious about reinterpreting the lodge form, but he finally accepted the outline undeniably revealed by his excavations. Sterns expressed his changing ideas to Putnam as follows:

I guess I will have to accept the rectangular house as is indicated . . . but it don't seem right. I thought no one but a white man was capable of making such a barbarous shaped structure. Why a primitive man should use it, I can't see. I don't want to believe it: but—the evidence is great.

P.S. Let me know if rectangular houses are at all common among primitive American tribes.⁶¹

Meanwhile Sterns kept digging. His normal procedure for excavating lodge depressions was to use a grid system of three foot squares. Materials were collected and catalogued by provenience. In most instances Sterns carried his excavations out beyond the demonstrable house limits to assure getting the actual pit outlines. At many sites he enlarged the excavations to include entire lodge floors although the complete house units apparently were not left exposed at one time for final documentation. At other sites he used an auger to determine the limits of the house floors. At any rate, Sterns typically kept a running account of his excavations, made cross sectional diagrams, and drew horizontal plans of the house structures. The data ultimately overwhelmingly demonstrated that most of the earthlodge floors were rectangular in outline. Gilder announced Sterns' new interpretation in an article published in *Records of the Past* in 1913⁶²—which did not exactly meet with Sterns'

approval.⁶³ Sterns, however, published his own findings in the *American Anthropologist* in 1914⁶⁴ and referred to the archeological complex represented by the structures as the "rectangular earth lodge culture" in his dissertation.⁶⁵

Another valuable contribution of Sterns to Plains archeology was his discovery and interpretation of the stratigraphy at the Walker Gilmore Site in Cass County, Nebraska.⁶⁶ Although the observation of stratigraphy and the use of stratigraphic methods had long been employed in geology and in European archeology, these practices were not common in North American archeology in the early 20th century. Sterns recognized this situation in the opening comments of his 1915 publication in the *American Anthropologist*:

A marked difference in the character of archaeology as treated by scientists of Europe and those of America has often been noted. The former studied relations of time and the latter relations of space. One considered cultural sequences and the other culture areas. . . . In America . . . the tendency has been to see all cultures as more or less contemporaneous except so far as the distinction has been made between the historic and the prehistoric.⁶⁷

On this basis Sterns underlined the importance of the stratigraphic data from the Walker Gilmore Site in working out the sequence of human events in the Missouri River Valley since "the proof of such sequences must be grounded on stratigraphic evidence, and stratified sites have been very rare."

Sterns' particular conception and expression of temporal, spatial and formal factors in the above-cited source is an interesting example of the implicit linkage of these dimensions prior to the 1930's and the inception of the Midwestern Taxonomic System which endeavored to define archeological units on the basis of *form* as independent and separate from time and space. After the late 1950's, schemes such as the Willey-Phillips system called for the explicit and concurrent manipulation of these three dimensions.

It is usual for the work of Nels Nelson in the Southwest or that of Manuel Gamio and Franz Boas in the Valley of Mexico to be cited as early examples of the use of stratigraphic method in New World archeology.⁶⁸ Certainly Sterns' work at the Walker Gilmore Site should be included along with the more familiar cases of the use of stratigraphy in reconstructing North American prehistory.

Sterns' description of the geomorphological situation and the cultural sequence at the Walker Gilmore Site was both cautious



Professor John L. Champe at the Walker Gilmore Site in 1946 indicates a cultural zone. Courtesy of University of Nebraska-Lincoln Department of Anthropology.



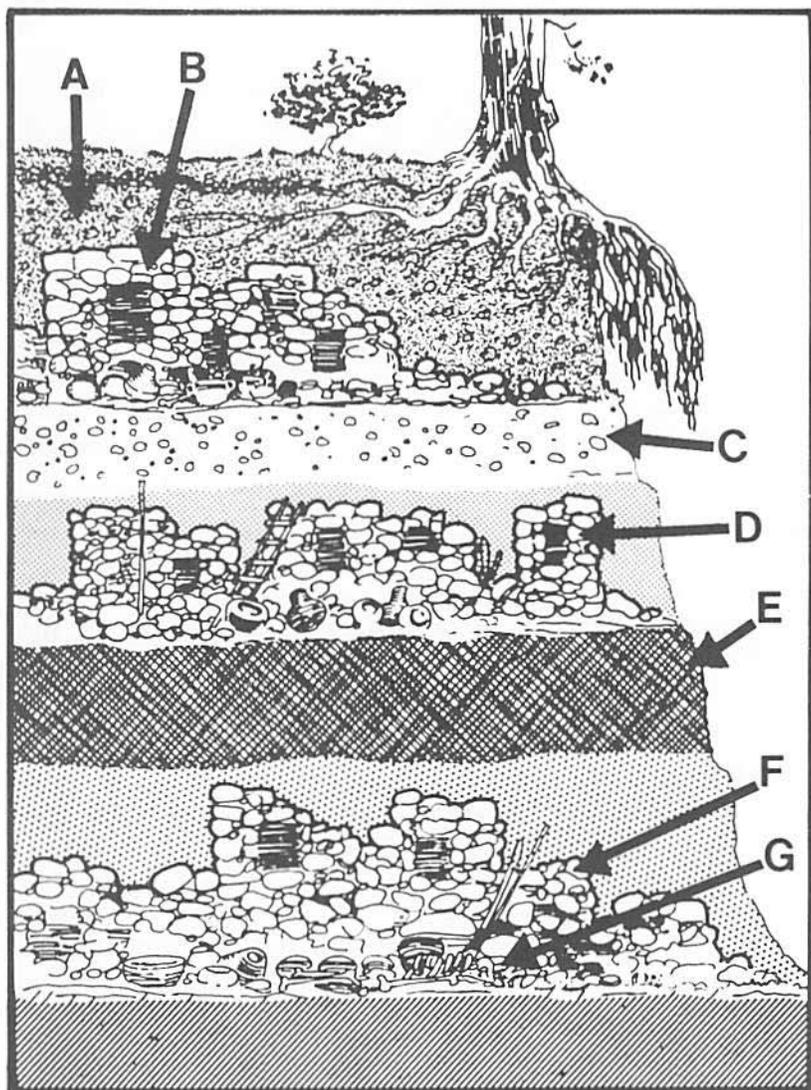
Fred Sterns exploring Exposure VII at Walker Gilmore Site. Courtesy of Mrs. John L. Champe.

and succinct. In a gully cut through the site Sterns found a series of ash beds exposed at a depth of 10 feet below the extant ground surface. These deposits included, among other artifacts, pottery which was distinguished by finger impressed rims, cord-roughened body surfaces, a lack of prominent neck/shoulder contours, and a lack of appendages (i.e., Sterns Creek type pottery of the Woodland Tradition). Occasional traces of charcoal appeared in the secondary loess approximately six feet above the lower cultural zone and four feet below the extant ground surface. No artifacts, however, were located at this level and Sterns commented that "the presence of man at that stage cannot as yet be proved. And if man lived there, nothing can be said of his culture."⁶⁹ Finally, there were evidences of the rectangular earth lodge culture which Sterns reasoned was located on top of the terrace which included the Woodland materials. Sterns' observations were more fully demonstrated by the University of Nebraska excavations at the Walker Gilmore Site in 1946. At that time a complete rectangular earth lodge floor was located on top of the terrace by Marvin Kivett, the crew's field assistant, and reported by John Champe.⁷⁰

In striking contrast to Sterns' scientific description of the Walker Gilmore Site was an article in the *St. Louis Post Dispatch* on October 18, 1914. The tabloid headline read:

*Nebraska's Three-Decker Prehistoric Towns: Harvard Archeologists Unearth Near Omaha Triple Strata of Villages, One Above the Other. Each Built by Distinct Race and Separated From Others by Centuries of Time. Pottery in Oldest Town Different From Any Other Found in America, Says Expert. Remains of a Lucullan Banquet of a Thousand Years Ago.*⁷¹

The accompanying illustration reflected the artist's conception of the site. He obviously had never been at the Walker Gilmore Site and, indeed, perhaps no archeological site in the Plains area. The illustration showed three distinct stratigraphically-separated cultural zones each of which included remains of masonry structures with windows, wooden ladders, well preserved bones, and painted pottery with black-on-white designs and vessel shapes which look suspiciously Anasazi (a Southwestern culture). The illustration in the *St. Louis Post Dispatch* is amusing, however, because it probably represented the perception most people had of North American archeology following the dramatic discovery and descriptions of Mesa Verde, Colorado, in the late 1880's and 1890's by Richard Wetherill and T. Mitchell Prudden.



Adapted from "Nebraska's Three-Decker Prehistoric Towns," St. Louis Post Dispatch, October 18, 1914. Key: A, top layer of earth; B, third village near surface, 19 feet above first village; C, stratum of earth; D, second village; E, stratum of peat eight feet thick; F, third village at bottom; G, tobacco pipes, clam and turtle shells, pottery sherds, and animal bones.

Beyond the boundaries of the Walker Gilmore Site per se, Sterns used the specific stratigraphic data and an associated chronologically oriented perspective in briefly outlining the apparent sequence of Plains prehistory as evidenced in his various finds.⁷² His ordering (from oldest to most recent) was: (1) Walker Gilmore culture, (2) rectangular earth lodge culture, (3) Nemaha camp site culture (i.e., Oneota manifestations as exhibited at the Leary-Kelly Site, as it is now called), (4) modern tribes. On the basis of spatial variations in the distribution of ceramic traits within the rectangular earth lodge culture, Sterns noted four apparent groups: northern (northern Douglas County and Washington County), Central A (Sarpy County along the Missouri River), Central B (Sarpy County away from the Missouri River), and southern (Cass County).⁷³ He concluded, however, that all these variations were within the range of the rectangular earth lodge culture and could not be demonstrated to reflect differences in time.⁷⁴ Sterns went on to offer some tentative guesses as to the absolute ages within his sequence: the Nemaha camp site culture was probably almost within the historical period, the rectangular earth lodge culture probably considerably before 1650, and the Walker Gilmore culture at least two to three centuries earlier than the earth lodges.⁷⁵ Considering the limited temporal controls Sterns had to work with at the time of his study, his suggested sequence was appropriate and quite accurate. Some 30 years later Champe⁷⁶ tightened this sequence a bit in his discussion of the temporal range of archeological complexes in the Central Plains, but in fact this general chronology was not radically changed until well after the advent of carbon-14 dating in the 1950's.

Sterns' ideas concerning chronological and processual relationships in the Plains were further articulated in an article entitled "The Peopling of the American Plains by the Indians" which was published in the *Scientific American Supplement* in 1918.⁷⁷ The holistic approach, hallmark of American anthropology, is nicely demonstrated by Sterns in his attempt to marshal evidence from archeology, ethnology, linguistics, and physical anthropology to substantiate his hypotheses. Lacking data on pre-ceramic complexes in the Plains, Sterns reasonably based a good deal of his reconstruction on the primary historical role of the sedentary tribes, particularly the Caddoan speakers who were seen as coming into the Plains from the south. The

impact of the Caddoan speakers in the Plains culture area was indeed significant, particularly if one accepts the arguments put forth more recently by Preston Holder in his book *The Hoe and the Horse on the Plains*.⁷⁸ But Sterns considered the Indians of the eastern Plains as the "least typical" of the Plains tribes.⁷⁹ Furthermore he saw the western Plains as essentially devoid of prehistoric archeological sites and reasoned that this area was largely uninhabited prior to the advent of the horse. In retrospect, of course, we know that Sterns was mistaken in these interpretations. In Sterns' time, however, that view was strongly fostered in the writings of Clark Wissler⁸⁰ and it was perpetuated into the 1930's by A. L. Kroeber.⁸¹ The static view which many scholars had of the Plains culture area really began to change only after the archeological discoveries made subsequent to 1930 were made known in William Duncan Strong's seminal article of 1933.⁸² In that respect, Sterns' scholarly skills are not unimpressive for he clearly and logically set out his ideas based on the geographical and stratigraphical evidence available at that time. Ironically, this article by Sterns has received little, if any, attention by professional archeologists working in the Plains.

From the beginning of his archeological work in eastern Nebraska, Sterns was interested in trying to define the settlement pattern represented by the earth lodges and attempting to reconstruct the social system reflected in the archeological residue. Sterns described this interest in a letter to Putnam in August, 1912:

I am collecting a mass of statistical information in regard to the location of the sites in relation to topography, to drift, and to springs, and also in regard to size, distance apart of the various houses, village arrangement and the probability of a common use of springs, of paths to those springs etc. I thus hope to get information in regard to social habits of the people.⁸³

The subject of the evolving conceptualization of Nebraska Phase (nee rectangular earth lodge culture) settlement patterns is a complicated one and need not be dealt with extensively here, since the present writer has discussed the problem elsewhere.⁸⁴ However, two specific practices in the work of early Plains archeologists, while certainly not unreasonable, definitely influenced their perception of the settlement patterns. One practice was to consider only the visible lodge depressions and not to test for structural remains which did not show up as surface anomalies. A second practice involved the separate site

designation of each visible lodge depression. Gilder, for example, followed these procedures and came to the conclusion that "these ruins are in no sense in village groups, but are scattered at random, the principal object appearing to have been to secure the most prominent and lofty natural sites above the river."⁸⁵ While this settlement pattern may well be one of the systems exhibited by the Nebraska Phase, it is perhaps not inappropriate to point out that Gilder's field procedures may have biased the resulting data to some degree.

Similarly Sterns grappled with this problem. He followed Gilder's practice of designating and generally conceptualizing individual earth lodge depressions as separate site units. He confessed to Putnam that:

In regard to the village arrangement, I have had some difficulty in determining what is a village. I have chosen two different standards and am keeping all data in regard to both. The first is to consider all sites on the same continuous ridge as part of a village unless of course, there is an unusually large distance between them (1/2 a mile or more). I call this conception of a village a "group" to avoid any impression that I am sure it is a village. The difficulty with it, is that it joins together houses which manifestly have no connection. . . . For my groups A, C and L of 6, 10, and 9 ruins this scheme works well. For group D of 18 sites and E of 15 it works fairly well. For F of 6 sites it does not work at all.

My other possible village—I call it a "sub-group" is to consider those sites together in which each is within calling distance of its nearest neighbor joined by the possibility of conversation or signal being passed from one end of the group to the other without anyone leaving his own house. This scheme reduces most of the villages to two or three sites and breaks up groups that really seem to belong together.

I am the more anxious to get some idea of the village because in the first place it might enable us to locate sites now lost or nearly lost as is the one I am working in and secondly I would be able to establish or discard a certain theory of mine about a possible clan-division or totemism among the Gilderites.⁸⁶

As illustrated above, Sterns did at least consider the possibility of the presence of lodges which did not show up as surface depressions at the time of his study. This matter is further indicated in his discussion of the lodges on the Latenser property in Douglas County:

As this group stands, it plays havoc with my theories in regard to village grouping. But from what I can learn from the people who have lived around here sometime there have been at least four more sites—one located between L 1 and L 2 in what is now an asparagus patch and the other three near L 4. In this case there would be two well marked groups, (L 2, X, L 1, L 8) and (L 7, L 6, Y, Z, L 4, L 5, V).

Perhaps I have never told you of my ideas of village arrangement. As a general rule the topography of this region is determined by the "loess" and consists (near the river) in the main of a series of long narrow, parallel bluffs. Most of the sites are built on these bluffs. On the typical bluff, there can be but one possible arrangement, a long line (single file). It seems to me that this "single file" arrangement became so engrained in their social structure that all villages were built that way even when the topography would permit a more compact and safer arrangement. This is the case with group A in which I first

excavated as well as some other groups. Given the missing sites here and [there] it would jibe with the theory. In all cases the information I obtained was volunteered and I verified it by surface finds.⁸⁷

Unfortunately, but understandably, Sterns did very little actual testing for lodge structures where they did not show up as surface depressions.

By the time Sterns wrote the final copy of his dissertation, he had apparently given up some of his previous ideas about the larger concentrations of earth lodges in villages. His "official" conclusion on this subject read:

Altho the "circles" are the remains of ancient lodge sites, they are *not* arranged in village groups. Some are isolated as much as half a mile away from any other site. When they are near each other, they are often merely spread out in a long line along the ridge. Even when they are located on the broad flat second bottom of the Missouri, the long line is retained. It may well be argued here that the builders lived a long time on the ridges, and the character of their villages became adapted to these conditions. When some of them did move to the second bottom where a more compact and safer form of village arrangement was possible, they still spread out in a long line. This may mean that the sites on the ridges are in general the older. However in the region in which the investigations were made, no difference in culture seemed to exist between the two groups. [Note: the word *not* is handwritten in ink above the typed line in Sterns' dissertation].⁸⁸

Sterns thus fostered the idea of a diffuse settlement pattern consisting either of isolated house units or lodges scattered out in lines at wide intervals.

Some subsequent writers have continued this point of view and the evidence, as described, for this hypothesis is not totally lacking.⁸⁹ On the other hand, as argued by the present writer,⁹⁰ there are methodological problems in analyzing the previously collected data and there are, indeed, many "sites" which indicate a less scattered and more nucleated village pattern. Much more ecological and chronological data will be required to provide more meaningful insights into this interesting problem. The fact that the present writer does not entirely agree with Sterns' ultimate reconstruction of the earth lodge settlement pattern is not particularly important here. The fact that matters is a recognition of Sterns' explicit problem orientation, his desire and diligent efforts to gather data to answer specific sets of questions, and his impressive attempt to reconstruct some of the dynamic interactional aspects of the residual settlement systems as he perceived them.

The United States in 1917 was in turmoil following its entry into World War I. It was also a year of great change in the life of Fred H. Sterns. A brief consideration of these changes provides

interesting insights into the relationships between world events and national socio-economic factors on one hand and the strategies available to and selected by individuals in their personal and professional lives on the other. In Sterns' case we see an individual who left professional archeology, perhaps narrowly missed being a physical anthropologist, and ended up in the business world as a statistician and economic demographer.

At this time the professional opportunities in anthropology in the United States were still quite limited. Academic departments in universities were few, faculty positions were scarce, and salaries for teaching and research were relatively low. Funding for research programs was difficult to obtain and, as illustrated by Sterns' abortive African expedition, the progress of World War I did not permit the pursuit of many scholarly projects.

Joining the war efforts was an option open to Americans at this time—but Sterns was rejected for military service because of flat feet. He is said to have considered this matter extremely ironic, since he was used to being on his feet constantly during archeological field work and “thought nothing of walking twenty miles.”⁹¹ Hoping to apply his academic training and degree to some useful purpose, Sterns vigorously attempted to obtain a position in anthropometry in the Surgeon General's Office in Washington, D.C. Bureaucratic red tape and administrative delays in processing the necessary paperwork thwarted that alternative.⁹² Meanwhile, the United States Shipping Board was advertising the need for mathematicians to assist in drawing up logistical plans for the efficient transportation of supplies to the Allies abroad. Sterns obtained employment with the Shipping Board, and this war-time experience provided him with professional experience as a statistician.

During this particular period, however, Sterns maintained his professional interest in anthropology. In addition to the paper he wrote concerning the peopling of the Plains,⁹³ Sterns published four anthropological articles after leaving the Peabody Museum. In one paper, entitled “Art and the Scientists,” Sterns provocatively addressed himself to the problem of evaluation in the arts and the sciences.⁹⁴ In an increasingly technocratic American society, the points raised by Sterns are still being debated. *The Scientific Monthly* for December, 1918, carried

Sterns' discussion on "The Place of the Museum in Our Modern Life." In that article, Sterns maintained:

The purposes of a museum are: first, to disseminate knowledge, second to advance it by research, and third to do such other things as are necessary to the forwarding of its two chief aims (for example, the storing and preserving of objects of scientific, historic, or artistic value).⁹⁵

He saw the chief function of a museum as educational and urged the linkage of museums to universities in terms of the potential for classroom and extension activities which would relate to laymen as well as professionals. Some 60 years later the present writer and his colleagues are still trying to get these points across to their university—which lacks a museum. So, again, Sterns' ideas appear quite visionary. He not only was ahead of his own times but was ahead of ours!

Two of Sterns' anthropological articles dealt with the suggested association of human remains, artifacts, and Pleistocene fauna at the Vero site in Florida.⁹⁶ Sterns apparently did not visit the site, but concerned himself with the data as published and with the logic presented by the adversaries in the controversy. Principal proponents for the legitimacy of the association—and thus the demonstrated antiquity of human populations in the New World—were E. H. Sellards, Thomas W. Vaughan, and Oliver P. Hay. Against the case as indicated by the field evidence were Rollin T. Chamberlain, George Grant MacCurdy, and of course, the ever-demanding Ales Hrdlicka. In his discussion Sterns pointed out certain weaknesses in the manner in which both pro and con arguments were presented. He suggested initially that "the supporters of Pleistocene man at Vero have shown the probabilities to be in their favor although they have not absolutely proved their case."⁹⁷ Ultimately he commented that "the case for Vero man appears to be stronger than it was six months ago. The importance of the problem is so great that we still hesitate in our convictions although the supporters of Pleistocene man in America appear nearer a definite triumph."⁹⁸ That victory, however, has not been forthcoming at Vero. The majority of American archeologists consider the Vero case inconclusive. Leading textbooks on North American prehistory either do not accept Vero as valid⁹⁹ or else they dismiss the site by not mentioning it at all.

With the surrender of Germany in 1918, the United States began to experience new socio-economic factors, and the post World War I period saw associated changes in the lives of many

individuals. Employment in professional anthropology was still at low ebb. On the other hand, employment opportunities for professional statisticians had taken a quantum leap. In the words of Mrs. Helen B. Sterns, we see the situation which faced Sterns in 1919 and gain insight into the astuteness of his strategy in drawing upon his past background and contacts:

During the war statisticians "became the rage." They were all besieged by business concerns to plan to come with their companies after the war. Mr. Sterns was offered \$15,000 to go with one of the big rubber companies, but he realized a depression was due after the war, and he decided it was best to go with a public utility that would not be affected by a depression. As Mr. Vail, president of the A.T. and T. Co., had given money at different times for archaeological expeditions, that fact might have brought to his mind the A.T. and T. Co. as an excellent place to apply for a statistical position.¹⁰⁰

Thus it was that in 1919 Sterns joined the American Telephone and Telegraph Company in New York as a statistician specializing in the study of shifting populations vis-a-vis the forecasting of demands for telephone service. He not only was involved with the applied aspects of population studies but also published on this subject.¹⁰¹ George L. Seaton, formerly the vice president of the Illinois Bell Telephone Company, was a close working associate of Sterns. Seaton's comments provide a good perspective on the type of work Sterns did at the American Telephone and Telegraph Company and the innovative approach he brought to the task:

I first met Fred in 1924 or 1925 when I was involved in Population Forecasting at Illinois Bell for the purpose of determining the market for telephones in our Company as well as the location and service description of those telephones for engineering and revenue purposes.

Fred had this project under his wing at A.T.& T. and as a basis for establishing his forecast for the USA he outlined and developed what was called an Economic Survey. The purpose of the Survey was to study the Primary Industries and their growth and location. From these data could be determined the Secondary or Service Industries which were dependent upon the basic industries. I think that this concept that Fred developed was new to business because as I worked with the Steel Industry and Meat Packing as well as other Primary Industries I found no similar work being done by any of them.¹⁰²

It would appear from this appraisal that Sterns' business colleagues saw in his work the same qualities of excellence, if not genius, which are exhibited in an analysis of his anthropological pursuits. Seaton, in fact, referred to Sterns as "a man with a very brilliant mind who was years ahead of his times."¹⁰³

Sterns never did entirely abandon his interests in Plains archeology. He returned to eastern Nebraska on many occasions to visit his mother who remained in Benson. On several of these trips, Sterns joined local amateur archeologists in field



Survey party at Sterns Creek, 1948: Walter Sehnert (left), Dr. George Gilmore, Alvin Wolfe, Mary Lou Callen Freed, E. Mott Davis, Fred Sterns, George Metcalf. Photo by John Champe.

work, some of which was rather fancifully reported in the newspapers. An article appearing in the *Omaha World Herald* on March 30, 1925, reported on excavations conducted at a farm east of Fort Crook Boulevard near Omaha. An accompanying picture shows Sterns, Gilder and others arranged around a frankly rather sloppy-looking excavation. The Sunday outing was apparently arranged by Gilder in honor of Sterns' visit to his home town. Champe¹⁰⁴ noted a reconnaissance trip he made with Sterns in 1940 to Site 25DK3 near Homer in Dakota County, Nebraska. Sterns also visited the Walker Gilmore Site several times during the 1940's¹⁰⁵ and on one occasion was photographed there along with other archeologists.

During the late 1930's and 1940's, Sterns was in frequent contact with William Duncan Strong, who was at that time a professor of anthropology at Columbia University. Through Carlyle Smith (a neighbor of Sterns and an anthropology student at Columbia University) Sterns became acquainted with John L. Champe, who had gone to Columbia to obtain his Ph.D. in anthropology under Strong's direction. Sterns was considered enough of an authority on Plains archeology that he was

included in the committee that put Champe through his final rite of passage for his Ph.D.—his dissertation defense on *Ash Hollow Cave*. In addition to some substantive questions on Plains archeology, so the story goes, Sterns grilled Champe on the possibility of deriving mathematical equations which might explain the manner and rate of accumulation of sediments in Ash Hollow Cave. Champe, a student of higher mathematics, took up the challenge and engaged Sterns in a sprightly and extended discussion, leaving Strong and other members of the review committee to ponder other matters.¹⁰⁶

In 1949 Sterns and Champe revisited the Walker Gilmore site with the idea of bringing the information up to date. In 1950 they roughed out a manuscript entitled "Sterns Creek Revisited" which dealt with the complex geomorphology of the site. Although this paper was never completed and published, a copy is on file at the Nebraska State Historical Society.¹⁰⁷

Throughout his life Sterns continued his general interests in contemporary American Indians and maintained personal contacts with Indians, particularly in the Southwest. These matters were noted by the American Telephone and Telegraph Company in an issue of their *195 Bulletin*¹⁰⁸ which included a photograph of Sterns with the Sanchez family at Acoma pueblo.

Fred H. Sterns died in New York on March 7, 1951, leaving as survivors his wife, Helen, and two children, Robert Brickett Sterns and Dorothy Irene Sterns Cliff. His obituaries identified him as an anthropologist and a population statistician. In the latter role—his principal profession—Sterns appears to have been in the forefront of the application of the social sciences to business and industry. This matter is perhaps historically significant in that "applied anthropology" and "applied sociology" did not really come into their own until some years later.

This study reveals the strategy of one individual who, after obtaining specialized training and an advanced academic degree in one discipline, chose to pursue other professional alternatives. Important factors in these decisions were the status of professional anthropology at that time and the national and international ramifications of World War I. Had career opportunities been better in academic anthropology, Sterns perhaps would have been one of this country's leading archeologists. Had World War I not thwarted the expedition to

Somaliland, Sterns might have become a well-known Africanist archeologist or ethnologist. Had the Surgeon General's office moved with more haste on Sterns' job application, he might have developed his skills in anthropometry, applied biometry, or forensic anthropology. Sterns' general background plus the opportunity to work with the Shipping Board during World War I, however, caused the scales to tip in favor of his being a statistician. This experience along with the contacts between industry and government agencies led Sterns into a career as a statistician and economic demographer with the American Telephone and Telegraph Company following the war. Today, of course, many individuals trained in academic anthropology face similar decisions and, one suspects, may have neither the foresight nor the success which can be observed in the career of Sterns.

This paper has attempted to review and analyze in detail the many contributions Sterns made to Plains anthropology in his early and relatively short career as an archeologist. Beyond his many substantive contributions to Plains archeology were his innovative approaches and conceptual frameworks which were, by several decades, ahead of his times. In conclusion one might observe that if Fred H. Sterns were alive today, he would almost certainly be labelled a "new" archeologist—particularly if he were to manipulate his data statistically as he obviously could have done with great finesse.

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15. (Manuscript) "Women on Scientific Expeditions," (Tozzer Library of the Peabody Museum of Archaeology and Ethnology, Harvard University, ANT St 4; received January 30, 1920).

NOTES

1. Data for this paper were gathered from a variety of sources: (a) published papers: see items 1-2, and 4-12 in Sterns' bibliography; (b) unpublished Ph.D. dissertation item #3 in Sterns' bibliography, of which one copy is on hand at Harvard University and one in the personal collection of Dr. John L. Champe, Lincoln, Nebraska; (c) unpublished manuscripts, items 13-15 in Sterns' bibliography, at the Nebraska State Historical Society and the Tozzer Library of the Peabody Museum at Harvard University; (d) archeological field notes for 1912-1915 and correspondence files in the Peabody Museum at Harvard University—catalogued and cited here as follows: PMC 1909, PMC 1910, PMC 1911, PMC 12-27, PMC 13-69, PMC 14-59, and PMC 15-6; (e) archival materials sent by Dorothy Sterns Cliff in October, 1968, to the Nebraska State Historical Society where they are catalogued as "A/MSS Sterns, Fred." In addition to two unpublished manuscripts, these materials include photographs, newspaper clippings, and a scrapbook made by Fred H. Sterns. The scrapbook consists of the "Supplement to the Harvard Alumni Bulletin" (Volume XVIII, #38, Wednesday, June 28, 1916) into which are pasted newspaper clippings and other memorabilia. Most of the clippings are from the *Lincoln Star*, *Lincoln State Journal*, *Omaha World Herald*, *Blair Democrat*, *St. Louis Post Dispatch*, and *Boston Herald*. Not all clippings, however, are identified as to newspaper source or date. For the purposes of the present paper, items whose source cannot otherwise be identified specifically are cited as NSHS-MSS with the page in Sterns' scrapbook indicated; (f) obituary notices on March 8, 1951, in the *New York Times* and *New York Herald Tribune*; (g) personal conversations with John L. and Flavia W. Champe; and (h) recent correspondence with Helen B. Sterns and George L. Seaton.

2. I wish to thank the following individuals for assistance in carrying out this research: Marvin F. Kivett for allowing full access to materials at the Nebraska State Historical Society; J. O. Brew, Stephen Williams and Nancy J. Schmidt for use of and permission to quote from archival materials at the Peabody Museum and Tozzer Library at Harvard University; John L. Champe for the use of his copy of Sterns' dissertation, photographs, and other important information stemming from the long-time personal friendship he and Flavia have had with the Sterns family; Helen B. Sterns and George L. Seaton for helpful correspondence in answering my many questions. I also want to acknowledge the assistance of a National Science Foundation fellowship under which some data for this paper were initially gathered. Finally, I express a debt to Dr. Gordon R. Willey whose "people approach" seminar in Meso-American archeology showed me how archeology and the prehistory of specific areas are not to be understood only in terms of the lithics and ceramics which have been extracted from the ground.

3. See especially the following: Earl H. Bell and G. H. Gilmore, "The Nehawka and Table Rock Foci of the Nebraska Aspect," *Chapters in Nebraska Archaeology*, 1 (4), (1936), 305-06, 328; John L. Champe, "Ash Hollow Cave: A Study of Stratigraphic Sequence in the Central Great Plains," *University of Nebraska Studies*, 1, (1946), 66-76;

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 13. *Ibid.*, 144.
 14. *Ibid.*, 145.
 15. Letters, Sterns and Gilder to Putnam, September 5, 1911, PMC 1911.
 16. Letter, Sterns to Putnam, not dated but apparently written in late October or November, 1911, PMC 1911.
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 19. Sterns, "Ancient Lodge Sites on the Missouri in Nebraska," *American Anthropologist*, 16 (1), (1914), 135-37; "A Stratification of Cultures in Eastern Nebraska," *American Anthropologist*, 17 (1), (1915), 121-127.
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 21. Sterns, "Peopling of the American Plains by the Indians," *Scientific American Supplement*, 85, (1918), 234-35.
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 23. Letter, Sterns to Putnam, July 23, 1912, PMC 12-27.
 24. Letter, Sterns to Putnam, August 13, 1912, PMC 12-27.
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 28. Sterns, "Ancient Lodge Sites," 135; "Stratification," 122; *Archaeology of Eastern Nebraska*, ii, *passim*.
 29. Letters, Sterns to Putnam, May 30 and July 18, 1912, PMC 12-27.

30. Gilder, *The Nebraska Culture Man*, (Omaha: Henry F. Kieser, 1926).
31. Strong, *Nebraska Archaeology*, 3, 44, 49-50.
32. *Ibid.*, 175-198.
33. *Ibid.*, 250-264.
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35. *Ibid.*, 184; "Plains Culture Area," 280-81.
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40. Gunnerson, "Some Nebraska Culture Pottery Types," 1952.
41. Gradwohl, 21-23.
42. Strong, *Nebraska Archaeology*, 50.
43. *Sunday State Journal*, January 12, 1913.
44. *Lincoln Star*, October 2, 1914.
45. Sterns scrapbook, NSHS A-MSS, 15, newspaper clipping, unidentified source.
46. *Ibid.*, 19.
47. *Ibid.*, 31-32.
48. *Ibid.*, 37.
49. Letter, Sterns to Putnam, no date though obviously written during the spring of 1912 and included in PMC 12-27.
50. Note added to page 4 of letter, Sterns to Putnam, July 3, 1912, PMC 12-27.
51. Letter, Putnam to Sterns, June 9, 1915, PMC Letters of Introduction File 1905-1915.
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53. Sterns, "Ancient Lodge Sites" and "Stratification."
54. Sterns, "The Coming of the Siouan Tribes into Eastern Nebraska," unpublished manuscript, 14-15, NSHS A-MSS.
55. Letter, Helen B. Sterns to David Gradwohl, September 3, 1977.
56. Warren King Moorehead, *Archaeology of the Arkansas River Valley*, (New Haven: Yale University Press, 1931).
57. Sterns, "Women on Scientific Expeditions," unpublished manuscript, Tozzer Library of the Peabody Museum of Archaeology and Ethnology, Harvard University, ANT St 4.
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60. Gilder, "Ponca Creek District," and "Earth-Lodge Ruins."
61. Letter, Sterns to Putnam, July 18, 1912, PMC 12-27.
62. Gilder, "Cannibal House."
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80. Clark Wissler, *North American Indians of the Plains*. (New York: American Museum of Natural History, Handbook No. 1, 1912); "Material Cultures of the North American Indians," *American Anthropologist*, 16, (1914), 447-505; *The American Indian*. (New York: Douglas MacMurtrie, 1917).
81. Alfred L. Kroeber, "Cultural and Natural Areas of Native North America," *University of California Publications in Archaeology and Ethnology*, 38, (1939), 76-83.
82. Strong, "Plains Culture Area."
83. Letter, Sterns to Putnam, August 13, 1912, PMC 12-27.
84. Gradwohl, 122-135.
85. Gilder, "Unexploited Culture," 252.
86. Letter, Sterns to Putnam, August 13, 1912, PMC 12-27. Note: There is at least one page missing from this letter in the Peabody Museum correspondence files. Therefore one is left "hanging" as to what further ideas Sterns may have had concerning the "Gilderite" social structure.
87. Letter, Sterns to Putnam, June 23, 1912, PMC 12-27.
88. Sterns, *Archaeology of Eastern Nebraska*, 192-193.
89. Adrian D. Anderson and Larry J. Zimmerman, "Settlement-Subsistence Variability in the Glenwood Locality, Southwestern Iowa," *Plains Anthropologist*, 21 (72), (1976), 141-154.
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94. Sterns, "Art and the Scientists," *Overland Monthly*, 72, (1918), 340-44.
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