

Horatio Nelson Rust and His Contributions to the Development of American Archaeology

Teresa Militello

Abstract

In the development of American archaeology, the Classificatory-Descriptive period (1840-1914) (Wiley and Sabloff 1980:34) witnessed significant participation by avocational prehistorians, many of whose efforts were welcomed as positive contributions according to nineteenth century academy goals and standards. The central focus of this article is one such amateur archaeologist, Horatio Nelson Rust, and the prevailing classificatory/descriptive intellectual climate in which he carried out his anthropological investigations. Evaluating his actions within historical context allows a more balanced assessment of a man whose legacy included the generation of several important museum collections, totaling nearly ten thousand artifacts.

In archaeology today, there is too little acquaintance with, or appreciation of, nineteenth century avocational archaeology. The following study provides some measure of recognition due Rust and certain others like him, and in so doing it should foster awareness of varied archaeological and ethnographic resources that are presently underutilized.

Introduction

The development of independent standards of judgment by archaeologists is made more difficult by anthropology's historical ethnocentrism. It is ironic that anthropologists, who are the first to teach that cultures must be judged in their own terms, are often the first to condemn the careers of their predecessors out of historical context. Turn-of-the-century

American anthropologists and archaeologists should be judged in the context of their own culture. [McVicker 1989:114]

Horatio Nelson Rust (1828-1906) (Figure 1) was a businessman with a passionate interest in archaeology, which he pursued throughout his life. Rust collected artifacts across North America, even excavating several sites in southern California, and was the Indian Agent for the California Mission-Tule River Consolidated Agency. He was known to many of the most prominent late nineteenth-century figures in American archaeology as a respected collector, and he amassed at least five major archaeological collections during his lifetime, four of which remain largely intact.

Most archaeological work conducted prior to 1900 has been stigmatized because it is judged within the context of currently acceptable levels of scientific research.

Rust's archaeological practices are no exception and have been viewed as substandard and having little value to modern scholars. It is my contention that avocational archaeologists such as Rust conducted themselves within the scientific standards of the time, and their collections and written notes and research offer valuable data when proper historical context is applied to their work. A greater appreciation of his work and that

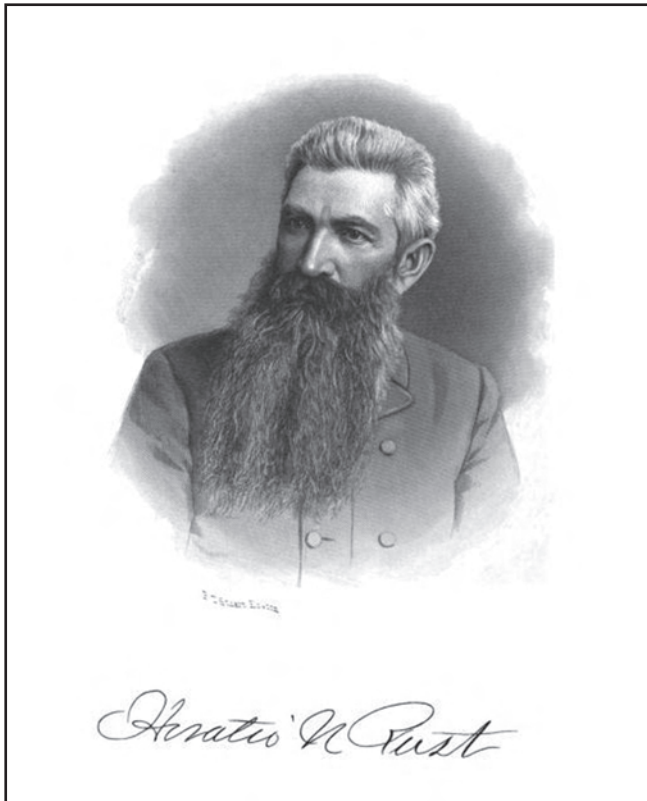


Figure 1. Portrait of Horatio Nelson Rust, ca. 1890s. (Image courtesy of the Beloit College Museums, Beloit, Wisconsin.)

of others like him may be generated if current scholars observe the parameters of the scientific climate in place when the collections were made. Moreover, many such collections include accompanying inventories, museum accession records, notes, and correspondence, and these resources often are overlooked or underutilized. Very often these documents contain general site and artifact descriptions, basic provenance data, and other information that may present a fuller picture under which the collections were generated.

Herein, Rust's contribution to anthropology is demonstrated by chronicling his varied activities in part by: (1) identifying current locations of major collections Rust compiled; (2) providing a list of his published scientific works; (3) discussing the content of his unpublished works, including letters, notes, and observations; and (4) documenting Rust's participation in scientific forums and the relationships he developed

with recognized authorities in the field of anthropology. Further, I present a summary of work conducted by other nineteenth-century avocationalists in order to allow the reader a comparison of their contributions with those of Rust. This will help illustrate the prevailing milieu that affected avocational archaeological endeavors and provides a more neutral appraisal of Rust's contributions to the development of archaeology as a professional discipline. Finally, I summarize the man's scientific endeavors and conclude that Rust made important contributions to American archaeology. This article represents a reworking of my Master's thesis (Militello 2000).

Rust's personal papers are located at the Huntington Library in San Marino, California. Numerous citations were garnered from these correspondences, manuscripts, and diaries. Much information for this study was obtained from the archives and collections

at Amherst College's Pratt Museum, Beloit College's Logan Museum of Anthropology, the Department of Anthropology Archives at the Field Museum of Natural History, the National Anthropological Archives, the Smithsonian Institution Archives, the University Museum of Archaeology and Anthropology at the University of Pennsylvania, and Yale University's Peabody Museum.

The Classificatory-Descriptive Period (1840-1914) in American Archaeology

Willey and Sabloff (1980:34) characterize American archaeology from 1840 until 1914 as the Classificatory-Descriptive period, a time when the main focus "was on the description of archaeological materials, principally architecture and monuments, and rudimentary classification of these materials." Horatio Rust's activities ensued within this period, when archaeological excavations were evolving into more than random diggings precipitated by curiosity and/or commercial pursuit. Increasingly, excavations were conducted with basic scientific intent so as to acquire the widest and most complete testimony to the past.

It was during this period that anthropology began to emerge as an academic pursuit (Willey and Sabloff 1980). Explanations of archaeological and anthropological data were moving away from suppositional and speculative concepts, although explanations were still affected by social perspectives of cultural hierarchy. Other significant events in the maturation of the field included the founding of professional scientific societies and journals and the establishment of anthropology museums and university departments.

Archaeologists of the 1800s were self-trained individuals, often with backgrounds in the natural sciences. Archaeology was dominated by those whose lifestyles and/or financial security allowed them the freedom to excavate and collect. However, in the United States the democratic ideal allowed comparatively broad

participation in archaeological investigations. In 1882, Otis Mason of the Smithsonian Institution opined that "every man, woman, and child that has sense and patience to observe, and that can honestly record the thing observed" can be an anthropologist (Hinsley 1976:41). John Wesley Powell (1881:84) stated that anthropology is a "vast field open to the American scholar ... there is a great want of trained observers and acute investigators." Recognized experts in the field quickly arose, but it was not until near the end of the century when the science was more firmly established and was becoming professionalized that the qualifications of being an archaeologist would more formally be defined. This interim time could be broadly characterized as a massive data gathering effort during which the concepts and theories of anthropological studies began to be more fully explored and tested.

One of the most consequential events in the development of American archaeology was the founding of the Smithsonian Institution in 1846. Established using funds from a bequest from Englishman James Smithson, the Smithsonian would dominate "American anthropology from its founding ... until the emergence of university departments after the turn of the century" (Hinsley 1981:9). The Smithsonian's first secretary, Joseph Henry, was a guiding force in the effort to sponsor and scientifically document archaeological endeavors in America. "Henry sought to build a system of trustworthy observers whose reports, systematized by instructions and instruments from the Smithsonian, would form the factual basis for scientific knowledge of the American continent" (Hinsley 1981:35). Under his guiding hand, reporting of archaeological data began to move away from the supposition and speculative stage to that of more evidential characterizations of information. Henry's advancement of the descriptive approach is evidenced by the Smithsonian's 1848 publication of Squire and Davis' *Ancient Monuments of the Mississippi Valley*. "Henry severely edited the memoir, which meant excising what he considered

unjustified speculation” (Hinsley 1981:36). This volume helped to establish a foundation of scholarly anthropological research and became the paragon by which archaeology would thrive. Henry also was responsible for disseminating the work of many European scientists by reprinting or translating articles he published in the *Smithsonian Annual Reports* (Meltzer 1983:5).

Due to the lack of widely established scientific criteria with which to understand American prehistory, archaeological examinations often were conducted with minimal control. There were few recognized procedures or archaeological techniques in the nineteenth century. Most of the first introductory texts on archaeology did not appear until the end of the century. Printed information on American archaeology during the mid 1800s rarely, if ever, contained information outlining how artifacts should be scientifically gathered.

One of the first attempts to standardize archaeological practice was a piece published by the Smithsonian in 1862. In this paper, Gibbs (1862:392) declared that the National Museum desired several types of specimens to add to its archaeological collections. First requested were Native American crania so as to build a representative series of all known tribes. He also appealed for contemporary and ancient specimens of art that included weapons, ornamentation, forms of dress, and other items of aboriginal manufacture. He instructed that the name of each specific tribe from whom items were obtained and that the particular use of each specimen, when not obvious, should accompany each ethnographic item. For ancient artifacts, Gibbs (1862:395) asserted that “it is especially important to ascertain the antiquity of these by careful observation of the circumstances under which they are discovered” and to note the depth of specimens when possible to “connect archaeology with geology.” To accomplish this goal, Gibbs (1862:392) addressed the circular to people who were most likely able to help him—“officers of the army and navy, missionaries, superintendents, and agents of the

Indian department, residents in the Indian country, and travelers to that end.”

Even with the general guidance provided in Gibbs’ circular, archaeological training was largely a process of self-education. Trial-and-error and previous field experience provided the lessons that allowed collectors to gather the most materials with a low probability of overlooking or destroying artifacts in the recovery process. Experience elevated the status of many early archaeologists and increased the scientific value of their collections in the eyes of their colleagues.

Interpretation of archaeological data was affected by the cultural standards and ideals of the time. “Archaeology is best understood as narrative, a particular and powerful form of origin myth that began in nineteenth-century Euro-American societies to take on increasing importance as a vehicle of validation for social groups engaged (or enmeshed) in industrial growth, capital accumulation, and colonial expansion” (Hinsley 1989:80). The concept of biological evolution set forth in Darwin’s (1859) *The Origin of Species* was interpreted by some to validate the Spencerian notion of cultural evolution, the archetype that man’s social and cultural past was one of various stages of hierarchical development climaxing with civilization. Edward B. Tylor (1832-1917) and Lewis Henry Morgan (1818-1881) were among the first to construct evolutionary models of different cultures using observational data gathered by missionaries and travelers (Rosman and Rubel 1981). These cultural models ordered societies into types. Existing cultures were analyzed for differences and similarities in order to determine level of advancement, from simple to complex. Schiffer (1988:470) states that people such as Morgan “identified societal types on the basis of organizational and technological traits. Such correlates were employed by archaeologists to make broad inferences about social traits from artifacts.” These models of human societies became the templates of scientific anthropological work for decades.

These cultural evolutionary paradigms were used when archaeological excavations were conducted and collections were gathered and evaluated. Thus, collected artifacts possessed the potential of being either the forerunner or earliest example of a more advanced object or tool currently in use or an artifact for which there was no known use and, therefore, was an example of a failed adaptation. One of the best known examples of this interpretive method is the work of A. H. L. F. Pitt-Rivers, whose collections were organized in progressions he believed to be evolutionarily accurate, such as celts eventually becoming paddles, swords, and spear forms (Chapman 1985:31). Based on the presence or absence of artifacts in various forms, whole cultures were evaluated and placed at certain points on the evolutionary scale.

Nineteenth century anthropologists were influenced by these social opinions and interpreted Native Americans and their cultures as being at a lower stage of development than their own. Archaeological data were rationalized as remnants of cultures that lacked the abilities necessary to successfully advance and flourish. Most viewed Native American culture as static in its development, and observations of contemporary Indian cultures were used as baseline data to interpret the prehistoric record. This concept linked archaeology to ethnological studies, and in the minds of many essentially negated the necessity to interpret archaeological data in other ways. It was not until the end of the Classificatory-Descriptive period that Native American cultures were viewed as dynamic and not inextricably linked to the archaeological record.

As archaeology became more popular, it generated more scientific/academic interest. In 1879, the United States Congress established the Bureau of Ethnology, later the Bureau of American Ethnology (BAE), in order to study Native American cultures. John Wesley Powell was appointed its director, and oversight of the agency was placed under the Smithsonian Institution. Almost immediately after its founding, there was tremendous

political pressure placed on the BAE to determine the origin of the Moundbuilders. Powell tasked Cyrus Thomas in 1881 with responsibility for this work and placed him in charge of the Bureau's Division of Mound Exploration. This was the first undertaking on a national scale to conduct archaeological excavations with a particular purpose or research design.

Thomas hired collectors to conduct the fieldwork in various sections of the United States. Numerous questions were evaluated, such as what are the various types of mounds, how are they geographically distributed, how were the mounds constructed, what are the methods of burials, and what kinds of materials are found in the assemblages? Diagrams and photographs were made of the mounds, and recovered specimens were sent to the National Museum for analysis. The results of this work were published by Thomas in the *Report on the Mound Explorations of the Bureau of Ethnology* in 1894, where he firmly concluded that the mounds were indeed built by Native Americans and their ancestors, contrary to prevailing racist and ethnocentric interpretations that Native peoples were not capable of such works.

Among anthropologists there was a sense of urgency to collect and document archaeological and ethnographic evidence of Native American Indian culture before it disappeared. This sentiment was precipitated by several factors, such as increased agricultural development, westward moving populations, and the looting of sites. Additionally, there was a panic that well-financed foreign interests were taking archaeological materials out of the country (Hinsley 1981; Cole 1985). In response to these circumstances, the antiquities market exploded, and the price of artifacts became highly inflated. Otis Mason (1881:393) noted that "the rage for antiquities among rich gentlemen ... has put a high value upon aboriginal relics." It became nearly impossible for poorly funded museums to compete with wealthy private collectors for high quality collections. Museums, such as the Smithsonian,

wanted artifacts of exceptional quality, but usually they were unable and unwilling to pay top dollar for such material (Johnston 1979). Limited by budgetary constraints, most museums could only purchase a few collections every fiscal year, and most institutions could only hope that major collections would be donated.

When museums were able to hire collectors, typically they were not salaried positions. The contracted individuals often were required to finance their own excursions and then wait for an indeterminate amount of time to be reimbursed (Cole 1985). The founding of the BAE was a fortuitous circumstance for the Smithsonian. The annual congressional appropriation for the agency was disbursed through the National Museum. The Smithsonian often took a small part of the BAE's annual funds for the acquisition of collections, and regularly used BAE field agents to generate collections (Hinsley 1981:236-237). This also increased the Smithsonian's ability to exert greater control over the researchers and types of collections they gathered, thus decreasing the Museum's reliance on outside collectors. Another way the National Museum was able to increase its collections involved funds received from Congress to install displays at World Expositions. With these monies, the Smithsonian was able to hire specific individuals to gather specific types of collections in order to display a full array of Native American cultures.

The Western world was enthralled with its technological triumphs over nature during the late 1800s. Extravagant displays of scientific and industrial advancements eventually resulted in World Expositions, the first of which was the Great Exhibition of the Works of Industry of All Nations, held in London at the Crystal Palace in 1851 (Badger 1979; Findling and Pelle 1990). Competition to be chosen as the site of the next Exposition was fierce (Badger 1979:45-49), and the winner, for that moment, would symbolically become the seat of culture and the focus of world attention.

The grandeur of each Exhibition surpassed that of previous celebrations. The desire to dispel appearances of mediocrity intensified, and exhibitions became larger and more exotic and dramatic in demonstrations of the perceived supremacy of European based culture. "While industrial museums and expositions displayed the superiority of civilization, museum anthropology made the same point by exhibiting the inferiority of other peoples" (Hinsley 1981:83).

Anthropology was represented at the 1893 World's Columbian Exposition in Chicago through Department M, or the Archaeology and Ethnology Department, and was under the direction of noted Harvard archaeologist, Frederick W. Putnam. Putnam was inspired by anthropological exhibits from the Paris exposition of 1889, where displays of Africans from French colonies living in replica villages were touted as "authentic replications of native life" (Rydell 1993:158). He carried this concept over to Chicago believing "that the popularization of anthropology with the living-people displays would produce tolerance of different cultures" (Brown 1994:112). These exhibits would be featured at the Midway Plaisance, which was also part of Department M. A mile long strip of land that was "hailed as a 'great object lesson' in anthropology by leading anthropologists, the Midway provided visitors with ethnological, scientific sanctions for the American view of the nonwhite world as barbaric and childlike and gave a scientific basis to the racial blueprint for building a utopia" (Rydell 1984:40). It featured live cultural displays of dozens of nationalities including Africans, Asians, and Europeans. Many types of Native American groups were present on the Midway, and outside the Anthropology Building was the Northwest Coast village occupied by Kwakiutl Indians brought to Chicago by Franz Boas. The Midway also offered visitors tours through reproductions of Mayan and Cliff Dweller ruins, concessions, jugglers and magicians, and other types of entertainment such as the world's largest Ferris Wheel. Originally conceived to be an implement to teach ethnological lessons and understanding, the

Midway became more of a sideshow. Eventually, oversight of the Midway was given to Sol Bloom, “a San Francisco entrepreneur who had signed up a troop of Algerian `dancers, acrobats, glass-eaters and scorpion swallows’ at the Paris fair” (Benedict 1983:49-50) due to fears that the Midway would loose money.

The Archaeology and Ethnology Department was housed in the Anthropology Building (Figure 2). Located at the southern end of the Exposition grounds, the two-story, 161,000-square-foot building housed an estimated one hundred fifty exhibits (Moorehead 1894a). The primary emphasis of the archaeological exhibits was the perceived advancement of technology. “Items on display ... enabled the visitor to compare old and new artifacts created by Native Americans and therefore to experience the evolutionary progress of these people” (de Wit 1993:64). There was an extensive array of exhibits featuring archaeological materials from North America, as well as displays from Mexico, Australia, Japan, and Peru (Moorehead 1894b). At the close of the Fair, the bulk of the anthropology collections became the foundation for what is today the Field Museum of Natural History.

Throughout the nineteenth century, the number of scientific societies and publications dedicated to the study of anthropology grew. These local and national scientific groups encouraged the participation of individuals from the private sector and provided a forum in which they could report their observations and findings. Established in 1847, the American Association for the Advancement of Science (AAAS) was the organization in which archaeological papers were presented and in whose Proceedings those papers were published (Griffin 1985:261). Section H of the AAAS was dedicated to anthropological studies in 1882, and Frederic W. Putnam was the Permanent Secretary of the organization from 1873 to 1898 (Griffin 1985). Another important scientific organization was the Anthropological Society of Washington, which later became the American Anthropological Association in 1902 (Meltzer 1985:249). A great number of pamphlets and journals were devoted to archaeological investigations, including *The American Archaeologist* (1897-1899), *American Anthropologist* (1888-present), and *The Archaeologist* (1893-1895), all of which furnished information regarding archaeology, ethnological



Figure 2. Photograph of the Anthropological Building, 1893 World's Fair (from Handy 1893).

studies, and features for collectors on how and where to obtain artifacts. Many publications provided various forums for those wishing to sell or trade artifacts, an accepted practice in the scientific community during this age. Moorehead (1894c) wrote that “the sale of a whole collection, or part of it, so long as complete finds are not split is always proper. Single specimens, bought of dealers, may be sold with a free conscience. Also complete finds. What is really wrong is the destruction of scientific testimony.”

Archaeology’s increasing popularity in America was evidenced by its success at World expositions and the number of organizations devoted to its study. The end of the 1800s saw the organization of museums and academic departments based entirely on the study of anthropology. The first institution based on archaeology was Harvard University’s Peabody Museum of Archaeology and Ethnology founded in 1866. Frederick W. Putnam, from the Peabody, organized one of the first, formal academic anthropology programs in the United States in 1891. It was a program that offered a graduate level three-year research course based in the Museum (Hinsley 1985:72). Other important anthropology departments and museums established during this time were those of the University of Pennsylvania, the University of California, and the American Museum of Natural History.

It was apparent that the field not only needed professionalization but also the formation of basic theories and procedures as more academically trained archaeologists were produced. The lack of such standards is clearly seen in the disputes over of the presence of Paleolithic man in America. Meltzer (1983:6) pointed out that Gibbs’ work made an effort to “elicit data that might reveal apparent similarities with European finds and was structured so as to direct research in a parallel fashion” which might “take American archaeology back to a very remote period in aboriginal history.” The view of parallel development and whether it

defined a similarly deep chronology was a topic that generated intense argument.

Many presumed that if an artifact was unrefined in appearance it could be inferred that the item was very old (Meltzer 1983:7). In the 1870s, avocational archaeologist Charles C. Abbott found some primitive-looking lithic implements on his farm near Trenton, New Jersey. He believed they were Paleolithic in age. Several reputable geologists were sent to the farm by Putnam to investigate, and they determined that the Trenton gravels in which the items were found were glacial in origin (Willey and Sabloff 1980; Meltzer 1985). Bolstered by this confirmation, artifacts identified as Paleolithic began to be discovered across the United States, leading to comparisons between European Paleolithic tools and those found in America. “The similarity between European and American paleoliths ostensibly confirmed the a priori belief in the geological antiquity of man on this continent ... it solved the problem of both the origin *and* antiquity of man” (Meltzer 1983:10).

Unfortunately, the Trenton artifacts had been severely misinterpreted since only their rudimentary forms were evaluated, not the archaeological context in which they were discovered. It was later resolved that the Trenton artifacts were not Paleolithic, but rather were made by recent groups (Meltzer 1983). One individual responsible for refuting this typological cross dating approach to archaeological interpretation was William Henry Holmes. Holmes was interested in technological stages of production of ceramics and stone tools and argued that the recently discovered “Paleolithic tools” were quarry refuse marking the early production stages in tool manufacture (Trigger 1989:127). His conclusions that the rudeness of an artifact and its age were not direct correlates marked a significant philosophical shift in American archaeology by illustrating that prehistory could not be interpreted solely by using a generalized approach to typology. It also supported the opinion that

only trained individuals using exacting scientifically rigorous procedures should conduct archaeological excavations.

Controversy surrounding events such as the Trenton gravels marked a pivotal change regarding avocational contributions to American archaeology. Questions were raised not only about when lay persons might be utilized but also whether their work was scientifically legitimate. Most university departments and museums, which initially were plagued by a lack of funding and a shortage of trained workers, were now firmly established and could support a staff to make collections. Instead of relying on collectors and the uncertain result of their efforts, institutions now had the ability to conduct their own research and gather the types of data they wished using graduates from their own anthropology programs. Many collectors recognized this trend and attempted to acquire salaried positions with professional institutions, but most met with little success.

Another element that diminished the museum world's reliance on avocationalists was a decreasing interest in American archaeology. By the beginning of the twentieth century, this declining appeal affected the market for antiquities, which became severely depressed by 1914 (Cole 1985). Many collectors found that they were unable to recoup their investments made in recovering and acquiring specimens. Museums and universities were in the position to purchase collections for fractions of their former value, since many individuals were now in desperate need of cash and sold their holdings at a loss.

Departmental anthropology inspired a more sophisticated scientific vision in addition to assisting in the development of professional archaeological standards. By the early 1900s, archaeological studies were rapidly moving from one of general typological arrangement to that of studying an object within the constructs of its culture. One outcome was the

widespread use of the direct historical approach as a tool for interpretation in museum displays. Further, Franz Boas had forever changed the institutional and intellectual paradigms of anthropology (Hinsley 1981:9). The ideological shift from material culture to ethnographic fieldwork greatly diminished the role of Classificatory-Descriptive methods increasingly viewed as antiquated and substandard. As the number of academically trained anthropologists grew, their direct interaction with the general public decreased. The prevailing attitude was that the services of non-professionals were no longer as useful as they had once been, particularly with the increasing number of formally educated archaeologists. Those who were not trained within the new academic framework "served a concept of science rather than a specific scientific discipline, and they valued generalization based on breadth of experience in several fields more than specialization" (Hinsley 1976:44). Archaeology was to be performed by academy scientists, thus diminishing contributions by amateurs, although there continued to be amateurs who held to the old museum tradition (see Koerper and Chace 1995).

The preceding has been a brief narrative of the progress of anthropology and archaeology during what Willy and Sabloff (1980:34) identified as the Classificatory-Descriptive period in North American archaeology. The personnel of investigations had transformed from a body of intellectuals holding generalized suppositions concerning ancient cultures to a field of rigorously academic experts now controlling peer reviewed publications, academic departments, and museums. It was within the earlier intellectual environment that most of Rust's archaeological and ethnographic endeavors occurred, but he was also witness to the emergence of a new paradigm.

The Life of Horatio Nelson Rust (1828-1906)

Horatio Nelson Rust should be remembered above all for his very successful efforts in obtaining and

documenting archaeological materials. His diligence resulted in the assembling of at least five major artifact collections. To fairly evaluate and then appreciate Rust's place in the development of American archaeological science, this biographical sketch will examine much of his life's work within the framework of those standards and objectives acceptable to the academy prehistorians operating within the Classificatory-Descriptive period.

Rust was born to Nelson and Elizabeth Rust on May 11, 1828, in Amherst, Massachusetts. Rust attributed his interest in archaeology to his uncle, O. M. Clapp, who gave him a small collection of archaeological artifacts and minerals at a young age. An additional inspiration for Rust was family friend, Dr. Edward Hitchcock, a geologist and president of Amherst College, who was always happy to answer his inquiries and encouraged him to add to his collection (Rust 1894a).

The Early Years: 1846-1874

Rust's father, Nelson, a blacksmith and maker of cooking stoves, died in 1846. Horatio, the eldest of four children then supported the family. He left school and worked at a variety of jobs, such as carpenter and edge-tool maker at the Collinsville Axe Works. After two years with the Axe Works, Rust was injured and was unable to continue in that position. He next apprenticed himself to a physician in order to study medicine and to manage the doctor's drug store.

Financial constraints forced Rust to terminate his apprenticeship and his hopes of becoming a doctor. He purchased a small stock of medicine and opened the Village Drug Store in Collinsville, Connecticut (Rust 1894b). While in Collinsville, Rust met and befriended abolitionist John Brown. Rust himself was an ardent abolitionist, and he maintained close ties with the Brown family for the rest of his life. After eight years, he sold his pharmacy and purchased a farm in South Deerfield, Massachusetts, where he lived for two years (A. Rust 1891; Rust 1894a).

The level of Rust's archaeological efforts prior to 1857 is unclear. He states that in 1855, he traveled to Ohio and visited the prehistoric earthworks near Newark, which motivated him to investigate archaeological sites and to gather as much information as possible about American Indians (Rust 1894a). In 1858, Rust took a position as a traveling salesman, representing firms in New York City and Connecticut. He traveled by horse and carriage all over New England and eastern Canada for nearly eighteen years. It is this period that seems to be the critical point in Rust's life that changed his casual interest in collecting artifacts to that of a passionate pursuit. His mode of transportation permitted him the opportunity to visit anyone known to have collections and to visit archaeological sites. Rust's personal journals list names and addresses of individuals who had archaeological materials and whom he wished to visit. He would examine their collections, purchase specimens, and try to document artifact provenance.

I found many interesting Indian relics and minerals "in situ" - and among farmers, and believe I induced many people to preserve what they found by telling them I would call again, or that some one else would, and would be glad to pay something for them. This induced people to preserve such specimens as they had heretofore looked upon as of no value, and [they] had [been] destroyed or lost. [Rust1894a]

Museum records from the University of Pennsylvania and Beloit College in Wisconsin indicate that items in their collections from Rust include artifacts from each of the New England states and New Brunswick and Quebec, Canada.

Rust made a reference in his 1863-1865 journal to a meeting with archaeologist Charles Rau to look at Indian relics (Rust 1863-1865). Rau, who was born and educated in Germany, later became curator of the

Department of Antiquities at the National Museum. “The discoveries and developments in the typological, descriptive classifications of Old World prehistory found an earnest devotee and spokesman in Rau” (Hinsley 1981:44). This may have been one of the first times Rust had contact with an individual conducting professional archaeological work.

Dr. Hitchcock’s son, also named Edward, was a professor of physical education at Amherst College and a lifelong friend of Rust. He solicited Rust’s help to obtain artifacts for the College’s archaeology cabinet (Hitchcock 1871), now the Pratt Museum of Natural History. Hitchcock was interested in expanding the archaeological collections of the museum, and he purchased a collection of artifacts from Rust in 1866 for approximately \$500 (Hitchcock 1866a, 1866b). Correspondence from Hitchcock to Rust indicated that the school received a variety of natural history specimens including archaeological human remains, lithic materials, and ceramics. This transaction probably was Rust’s first major sale of archaeological materials. “I remember now many specimens in the collection which I found, and which it has always been a pleasure to me to see preserved” at Amherst College [emphasis in original] (Rust 1894a). Rust provided more objects to Hitchcock after the initial 1866 sale and was often asked to help procure unique and difficult to obtain items (Hitchcock 1868a, 1868b, 1868c, 1869). In a letter to Spencer Baird, Rust states that he also donated his collection of stone bowls to Amherst (Rust 1872). An accurate accounting of what the University obtained from Rust is unavailable because a fire destroyed much of the Museum’s documentation in 1884 (Edward Belt, personal communication 1992). There are photographs of archaeological items listed as being at Amherst College in Rust’s personal papers at the Huntington Library; these could be part of the materials he acquired for them.

Rust was a medical volunteer associated with the 16th Connecticut Regiment at the outbreak of the

Civil War. Under the command of General Ambrose Burnside, Rust aided the wounded on the battlefield, assisted with amputations and other surgery, and transported disabled soldiers to their homes (A. Rust 1891:426). He was involved in several major battles, and following the engagement at Antietam, he met and aided noted American author Oliver Wendell Holmes with finding his injured son (Apostal 1979/1980). Rust was awarded the honorary rank of major as a result of his service. He returned to his position as a traveling salesman following the war and continued to pursue his archaeological interests.

Rust’s growing interest in archaeological pursuits is clear in a letter he wrote to Spencer Baird (Rust 1872). In that letter, Rust requests any works published by the Smithsonian on Native Americans and discusses his own collection. Rust credits his position as a traveling salesman to his ability to collect artifacts and posed several questions regarding Native Americans and antiquities. He also comments that “I let Prof. Marsh have some choice things about one year ago ... I am not able to give all I collect to Amherst nor to keep them therefore, I have sold to Yale” (Rust 1872). Rust sold a collection of prehistoric ceramics from Missouri to Yale in 1876, but the collection mentioned in this letter to Baird predates the Missouri collection. The composition of this 1870-1871 collection, the precise date of sale, and any record of it at Yale University have not yet been located.

The Middle Years: 1875-1881

Rust moved to Chicago with his wife and family in 1875 and operated the Central Warehouse on the southwest corner of Rush and Kinzie Streets (A. Rust 1891:426; Apostal 1979/1980). He held memberships in a number of local organizations, including the Chicago Academy of Sciences and the Chicago Relief Association, a group that collected goods and funds for freed slaves in Kansas (A. Rust 1891:426-427). One of his more notable achievements as secretary of the

Chicago Relief Association was to arrange a lecture tour by Reverend Josiah Henson to raise money for the organization. Henson had been the inspiration for Harriet Beecher Stowe's character of Uncle Tom. Rust also was made a member of the American Benevolent Society for his lifetime of humanitarian service.

Rust's archaeological investigations increased while in Chicago. He excavated and collected archaeological artifacts in Illinois, Indiana, Iowa, Kentucky, Michigan, Missouri, Tennessee, and Wisconsin (Rust 1873, 1875, 1878a, 1878b, 1879a, 1879b, 1879c). Rust's personal scrapbooks, which are located at the Huntington Libraries in San Marino, California, contain numerous newspaper articles and announcements of lectures on archaeological topics he presented to various organizations and public forums. Further, he exhibited his archaeological collections to raise money for several groups and causes. He was invited to attend Indiana's first State Archaeological Association meeting at Indianapolis in 1876 (Case 1876) and was named as a corresponding member of the organization (Anonymous ca. 1876). He gave an address on his archaeological work and accompanied the group on a train ride to see the earthworks at Anderson, Indiana.

In 1876, Rust made his first of two trips to Missouri and excavated in Scott and Mississippi counties. There he "examined many graves and mounds going south to James Bayou some twelve miles and in all directions from two to five miles and finding ... many graves and much pottery" (Rust 1895). One of Rust's diaries (1875) indicates that he excavated at two sites—Sandy Woods (23ST26) and Spanish Grant (23MI31). He recorded basic information on his archaeological activities in Missouri. Typical of the classificatory-descriptive archaeological data generated during those times, Rust provided descriptions of the sites, the sizes and shapes of the earthworks encountered, the type of soil in which he dug, and the location of the burials he excavated.

The graves were found to be 18 inches to 4 feet deep. In all instances the bodies were buried in a horizontal position, but in nothing like regular order ... the bones were generally so much decomposed that they could be saved only by the greatest care ... from one to three articles of pottery were deposited near the head of each individual. [Rust 1877a:532-533]

He listed the variety of things associated with each burial, such as galena, hematite, bone awls, shell, channel coal, and clay balls. He detailed the styles and shapes of pottery found, and noted the absence of worked stone tools and woven fabrics. He determined that the sites were of great antiquity by the size of the trees that grew atop the mounds.

It is interesting that Rust felt uncomfortable with the quality of his work due to lack of time and money. "I very much regret that these works could not have been more carefully and intelligently opened ... my endeavor has been to preserve all the facts which came to my knowledge, and I only regret that I could not have done the work more perfectly" (Rust 1877a:535). He still maintained remorse over the level of work performed decades later as evidenced in a letter to Stewart Culin at Yale University in which he lamented, "no one could do careful digging or make proper examinations nor did we know how important it was to be careful and report correctly. I did the best I could and saved the most specimens possible" (Rust 1899a). Rust's comments indicate an increased awareness of the importance for more painstaking examinations of his work and a note of maturity in his approach to excavations relative to this earlier experience.

In 1875, Rust worked with W. B. Potter of the St. Louis Academy of Science at Sandy Woods. In Rust's personal diaries (1875), he notes that Potter was the first to scientifically excavate and survey the site. This may explain why Rust conducted only a casual survey

of the site and focused his attentions on the graves and their contents. Carl Chapman (1980:193) was critical of Rust because he “dug on the site for commercial purposes and was not very careful in his descriptions of the mounds fortifications, and other surface features.” There is little doubt that Potter was a more careful archaeologist than Rust, although Potter had the ability to return to the site over the next few years due to his backing from the St. Louis Academy of Science. Further, Chapman’s statement suggests that Rust’s motivations for excavating were for monetary gain. This reflects the attitude held by many contemporary archeologists that privately initiated work from this era was more mercenary in nature than scientifically inspired and thus has little value compared to those sponsored by academic institutions. Even the most professionally executed excavations at this time are considered crude by modern standards. Field excavation techniques did not begin to be standardized until the late 1800s.

In October 1876, Rust sold roughly nine hundred pieces of pottery, many from Sandy Woods, to a group comprised of O. C. Marsh, Henry Farnham, T. S. Woolsey, A. Van Name, and James E. English. The group paid \$2,500 for the collection for Yale’s Peabody Museum (Accession Number 906). Accompanying the collection, Rust sent a diagram of the Sandy Woods site that identifies the locations of the burials excavated, a photograph showing several of the recovered pieces of pottery, and a narrative of his fieldwork.

Rust returned to southeast Missouri in 1877 for further excavations. He again was successful in his archaeological efforts, and many parties were interested in obtaining his newest collection of pottery, including the National Museum (Baird 1877a). In 1877, Rust donated an assortment of archaeological artifacts, primarily pottery and sherds from Illinois, to the Smithsonian. These are listed under Accession Number 5975 (Henry 1877). He sent the box of artifacts and a list of the accompanying materials, and in an included letter

to Spencer Baird, Rust indicated his interest in enhancing his archaeological background and his hopes that the Smithsonian could purchase his archaeological collection.

I shall be very glad to receive as many of the publications upon Indians and Archaeology as you can furnish me as I am anxious to learn all that is known upon the subject. I hope you will be able to attend to it as soon as may be consistent with your other duties. I will try not to be long indebted as I hope to have some things I can spare. I regret I am not in a condition to give you my entire collection but Uncle Sam can not expect his nephew who has to work every day to live to make such a donation. [Rust 1877b]

Baird was unable to procure the funds to acquire the collection, stating “[t]his I regret extremely” (Baird 1877b). The majority of the artifacts recovered from his 1877 trip were purchased in 1890 for the University of Pennsylvania, University Museum by a group headed by Dr. Edward Drinker Cope. This collection included many other items gathered across North America by Rust between 1877 and 1890. Similarly, as with archaeological collections generated today, Rust cataloged the collection, numbered nearly every item, included data on the location of where the materials were collected and how they were used, and provided labels for several pieces. The collection catalog reveals that Rust collected items that frequently were neglected by nineteenth century archaeologists such as potsherds, charred bone and wood. Rust donated a few pieces of Missouri ceramics for an auction to benefit the Old South Meeting House in Massachusetts (Apostal 1979/1980) and gifted a small collection to the Public Library Association of East Hampton, Massachusetts.

Rust presented the results of his archaeological work in Missouri before his peers at the Chicago Academy

of Science and at the August 1877 AAAS meetings in Nashville, Tennessee (1877c). He formally accepted membership in the AAAS in 1879 (Rust 1894 b). Attending the AAAS meetings gave him the opportunity to personally meet John Wesley Powell and several other prominent American anthropologists. According to Rust, at the Nashville meetings Powell had “proposed that I ... allow him to publish my ... account ... I did not care to give him any definite answer as I had a similar proposal” (Rust 1877d). This other proposal probably was from the publishers of the *Western Review of Science and Industry*, which is where Rust published an article (1877a) on the Missouri excavations he conducted in 1876. This was his first professional archaeological publication.

While in Tennessee, Rust excavated several stone box graves six miles west of Nashville, near the remnants of Fort Zollicoffer. He described the construction of the limestone-lined burials and the artifacts and remains found therein in a newspaper article (Rust ca. 1877) and gave a talk about this excavation before the Academy of Science in Chicago. Rust observed that the backsides of the skulls he found were flattened much like those that he discovered in southeast Missouri and in other Mound Builder burials, but he erroneously concluded that this effect occurred strictly post mortem due to the weight of the sediment covering the grave. Rust presented some of the materials he recovered from the excavations to Frederick W. Putnam for Harvard’s Peabody Museum in October 1877.

It was during the late 1870s that Rust began regularly corresponding and exchanging artifacts with a number of archaeologists at home and abroad. He was in contact with many well-known authorities in American archaeology, such as Spencer Baird, Frederick W. Putnam, and international figures including Danish scholar Iapetus Steenstrup, and Thomas Frederick Cheeseman of the Auckland Museum in New Zealand (Rust 1899b; Blackburn and Hudson 1990:144-145). Rust most likely initiated contact with these men to

persuade them to purchase his collections or to influence them to hire him to collect for their institutions. Throughout his correspondences, he indicated that inspiration for his archaeological activities was scientifically motivated, and he demonstrated a sincere desire to expand his understanding of archaeology. Rust frequently posed a bevy of anthropological questions in his letters and often asked how to obtain archaeological publications. He often wrote Baird and requested copies of all available Smithsonian publications in archaeology. Rust’s eagerness to educate himself about anthropological topics is clearly seen in these letters with such statements as, “I am very anxious to have all you can furnish me upon Ethnology and Philology ... I notice among the Reports many articles upon Indians which I ought to become familiar with and should be very glad of them all, please do the best you can for me and be sure they will be carefully studied” (Rust 1877d); “I sent for the following [publications] and am very anxious to obtain them if possible ... I need some of them very much” (Rust 1877e). Queries and requests of this nature indicate that the incentives behind his archaeological work were more substantial than mere financial gain.

While at the World Exposition in Philadelphia in 1876, Rust (Rust 1894a) “saw specimens from Dakota of stone hammers with the original handles of wood and rawhide in them.” Excited by the idea that there were living peoples who still used such tools, Rust made arrangements to go to the Great Plains with the express purpose of meeting and seeing these groups for himself. Rust secured a letter of introduction from his friend General Phillip Sheridan and permission from the U.S. Army in 1878 to travel up the Missouri River into the Dakota Territory following the route taken by Lewis and Clark (Sheridan 1878). He went to Forts Sully and Pierre and interviewed Native American groups in the area to directly obtain information about their culture. From these tribes, he collected clothing and moccasins, ornaments, pipes, bags, game pieces, musical instruments, weapons and stone

hammers. The last were similar to the type he had observed in Philadelphia. He interviewed several Native Americans on various topics, including their manner of dress, the games they played, and food preparation (Rust 1875) and recorded data in his personal journals. Acquiring first hand ethnographic data from native informants is a practice that contemporary anthropologists continue to use, particularly ethnoarchaeologists. Rust excavated archaeological sites in the area and purchased two cloth copies of a buckskin winter calendar that were attributed to a Mandan named Lone Dog. According to Peabody Museum records (Accession # 3-25, catalog record 10/62566), this image was used as the cover decoration of the BAE Annual Reports. He donated one of the calendars to Harvard University, which Putnam gratefully accepted "as we have nothing of the kind here at the Peabody" (Putnam 1903a). The second copy was given to the University of Pennsylvania in 1893.

Rust had taken copies of the now infamous Davenport Tablets on his trip through the Dakotas and had asked the Native Americans he encountered for their interpretation of the inscriptions. He reported to the AAAS at meetings in St. Louis (AAAS 1878) and in Montreal (Rust 1881; Mallory 1884) that the Mandan Indians believed the pictures on the tablets indicated a ceremony taking place in an earthlodge during the winter but considered the supposed writing to be merely decorative elements. At this time the tablets had not yet been proven fraudulent, and Putnam declared Rust's findings to be the best interpretation of the work to date (Anonymous 1882). Anthropologists' acquiring ethnographic data from living groups to interpret archaeological materials was a practice that became much more common at the turn-of-the-century.

Rust traveled to Mexico in 1879 as the historian for a trade delegation. According to his diary of that year (1879b), he stopped in New Orleans en route to Mexico. Among Rust's papers is a certificate dated March 11, 1879, from the New Orleans Academy of

Science that officially named him as a corresponding member. While in Mexico, Rust visited the pyramids at Teotihuacán and Cholula (Rust ca. 1894a). Inventory notes from the University of Pennsylvania's University Museum of Archaeology and Anthropology, the Logan Museum of Anthropology, and Beloit College's student newspaper *The Round Table* (1894), all contain information regarding artifacts Rust recovered from these two major archaeological sites. He became a corresponding member of the Mexican Society of Geography and Statistics and presented the National Museum of Mexico with gifts of artifacts from the United States, including objects he had recently acquired in the Dakotas. In gratitude, the museum gave him numerous artifacts, including Aztec ceremonial obsidian blades that were presented by Mexican President Porfirio Diaz (*The Round Table* 1894:106).

Exploring the West in the 1880s

Rust visited California in 1881 and purchased several acres of land in Pasadena. He settled there that year and sent for his family in 1882. Rust's extraordinary level of activity continued in the West. He started a wholesale nursery business, became an immigration agent for the state of California, and actively participated in civic affairs. He served as secretary of the Los Angeles Branch of the Indian Rights Association and penned an article regarding the case of Rogerio Rocha (Rust 1904a). Rocha was a Mission Indian who was unscrupulously evicted from his home, despite rights given to him and other Indians living on Spanish Land Grant properties. Rust was a member of the Pasadena Free Library and Village Improvement Association (Apostal 1979/1980:307) and was the vice-president of the Pasadena Academy of Sciences (A. Rust 1891:427). He became a special correspondent to the Chicago *Daily Inter-Ocean* and other eastern newspapers, writing about southern California (Apostal 1979/1980:307), and he organized citrus fairs in Pasadena, Chicago, and St. Louis to promote the state

by displaying the wide array of produce available. By presenting lectures and glass slide shows on his archaeological experiences and by exhibiting his collection, Rust raised funds to help build the local South Pasadena public library (Anonymous ca. 1890s).

The move to California presented new areas in which Rust could make archaeological explorations. His personal journal (Rust 1883a) documents a trip he made into the interior of the state to investigate the tribes living near Temecula and Lake Elsinore. In that same year, Rust donated to the National Museum a basket hopper mortar and pestle obtained from a family of Mission Indians. In a letter to the Museum, he stated that he had watched as acorns, pine nuts, and grass seeds were ground “in the mortar, sifting the meal through a coarse basket made for the purpose. The meal they bake upon a hot stone or piece of iron ... and they make an unleavened bread ... call[ed] ‘Tortilla’” (Rust 1883b). He commented on other foods that were consumed, how they were prepared, and the variety of implements used for processing grains. Shortly after shipping the mortar, Rust sent samples of the dried cactus fruit and acorns that were pulverized in mortars. These grinding tools and foodstuffs are recorded at the Smithsonian under accession numbers 13823 and 14494, respectively.

In 1884, he made the first of several trips to the Arizona Territory (Rust 1884). He traveled to Albuquerque and visited the Bryne Indian School. Later he secured a guide and traveled to Acoma Pueblo, where he visited with the residents, examined their houses, observed their activities and manner of dress, and spent the night (Rust 1884).

Rust applied for a position with the U.S. Indian Service in 1880, 1885, and 1889 (Trever 1950). Helen Hunt Jackson, noted author and Indian rights advocate, lobbied for his appointment, Rust being one of “the only men in Southern California that Jackson absolutely trusted” (Mathes 1990:73). During

President Harrison’s administration (1889-1893) Rust was named Indian Agent for the California Mission-Tule River Consolidated Agency, which extended over nearly the entire state. He took the oath of office as an Indian agent in June 1889 (Harrison 1889).

As an agent, Rust traveled to the various tribal reservations in his jurisdiction, including Luiseño and Cupeño territory. He described fiestas near Warner’s Ranch and Campo near the Mexican border. He described the fiestas as family affairs consisting of eating, drinking, racing horses, gambling, and all kinds of merrymaking (Rust ca. 1893a, 1899c, 1906a). He witnessed ceremonies at each locale for young girls entering puberty that included a purification ritual lasting for four days and nights. He explained that green herbs had been placed over a fire built inside a large pit measuring approximately 5 x 3 feet. The girls would lie on the vegetation through which steam would arise, and blankets would be placed over them. Old women would dance around the pit and chant and sing throughout the ceremony. Occasionally, visitors would join in, and Rust noted that their “efforts seemed to encourage the tired old women” (Rust 1893). Rust’s Indian informant explained that coins were thrown to the crowd by one old woman “to teach the girls to be generous” and that yards of fabric and sacks of wheat were given to the poor “to teach the girls to be kind to the needy” (Rust 1893).

At the end of the four days, the girls arose and were given garlands of leaves woven by friends that were placed on the young girls’ heads (Rust 1906a). Later, they were led out to the hills and shown an *atulku* (Figure 3), a sacred stone object and vulvar representation, and the garlands were hung on the rocks and in the bushes. The *atulku* was reburied (Rust 1893, 1899c, 1906a; see also Koerper 2007:84-87). Rust did not provide specific information as to how the *atulku* was utilized during the rite. In a letter to Alfred Kroeber (Rust 1902), Rust explained that he “was able to locate the spot” where an *atulku* was

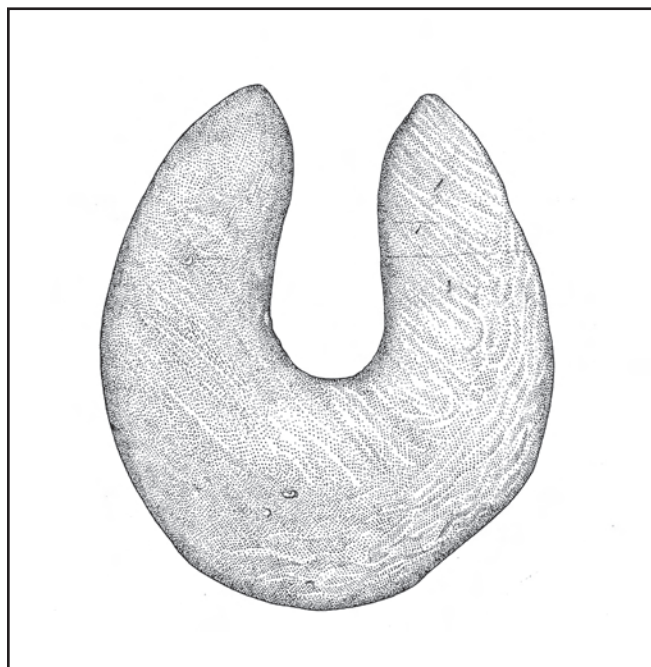


Figure 3. Crescent-shaped *atulku* collected by Horatio Rust. It is from either the Cupeño or the Luiseño, Agua Caliente/Warner's Ranch, San Diego County. Rust gave its dimensions at 13 x 15 inches. Held by the Logan Museum of Anthropology (cat. no. 17924), Beloit College.

buried at Warner's Ranch and surreptitiously acquired the item. This artifact currently is in the collections of the Logan Museum of Anthropology at Beloit College (see Koerper 2007).

Because of the significant amount of direct contact Rust had with the California tribes, Otis Mason, the first curator of ethnology at the Smithsonian, encouraged him to keep "a diary of ethnography" and to "write me and tell me something new" (Mason 1892b). Rust gave Mason a draft report of an account of the Mission Indian maturation ceremonies he witnessed. He told him that "should you think it worth while I will revise it and send it in for the next meeting of the A. A. A. I was asked to contribute it to the *California Magazine* but will be obliged if you will advise me which to send it to if either" (Rust 1892).

Also during 1889 on a trip to the Trinity and Klamath Rivers area of northern California, Rust saw Native Americans using bows and arrows for hunting and hand adzes to hollow out redwood logs for canoes. He interviewed several individuals about the very large

obsidian blades he had seen. These measured up to a foot in length and were no more than two inches in width. He was told "that their purpose was to indicate official positions in the tribe—insignia of authority. Another said they had ... significance in certain ceremonies and dances. Still another informed me that they marked a certain standard of wealth, or importance, in their tribal organization" (Rust 1897a:285; Kroeber 1905a:691; Wallace 1978:165). Rust indicated that these blades were highly prized by their owners and in some circumstances were common property of the tribe. In his personal notes (Rust 1890), Rust related that he was able to purchase two blades from a Native American man but he would not sell those left to him by his father, but willingly sold the heirloom blades from his wife's family. Obsidian ceremonial blades were often kept in secret places by their owners and sometimes were "lost by the sudden death of the only persons who knew their hiding places" (Rust 1897a:286; Gould 1966).

While on this trip, Rust made the acquaintance of a Washoe Indian named Tom. Rust asked him to make a

number of arrowheads and blades from obsidian and quartz. He published two articles in 1897 regarding his encounter with Tom. One (Rust 1897b) was for the magazine *Land of Sunshine*, which was published and edited by noted southwestern expert, Charles Lummis. The other piece was for the scientific journal, *The Antiquarian*, in which he specifically focused on his informant's use of pressure flaking to create the finely crafted points.

The principal implement he uses in this work is a bone from the leg of a deer, ground down to about the fourth of an inch in diameter at the end ... and tapering at the other end to a flat surface. The process followed ... in the manufacture of these weapons is, first, to break from the obsidian block, by peculiarly directed sharp blows, a number of flakes, from which he selected such as approximated in form and size the object he had in his mind. Then folding a piece of cloth, or buckskin, he laid this on the inner thick part of his hand, and on this laid one of the obsidian flakes which he held in place by the third and fourth fingers of the hand. Placing the point of the bone implement under the edge of the fragment of obsidian, he gave the bone punch a rolling motion over and against the sharp edge of the stone. In this manner he glided the bone tool back and forth along the line to be worked down, with each movement chipping off fine flakes. When he wished to remove large flakes he placed the point of the bone against the sharp edge he wished to detach and pressed the punch firmly endways against it until it yielded and split off. [Rust 1897a:284]

Wuertele (1975:38) stated that "this is the earliest ethnological reporting of this technique in California." Rust presented three papers to the AAAS in Indianapolis in 1890 (Henshaw 1890) based on data he gathered during this trip.

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Rust in the BIA: 1889-1893

The Bureau of Indian Affairs' (BIA) principle objective was to mainstream Native Americans so as to make them self-supporting and "civilized." The prevailing opinion of the U.S. Government at the time was that education would enable them to become self-sufficient, active members in the larger society. Further, it was determined that Indians should not be relegated to remote parcels of land. Thus, the Government sold off large sections of unused tribal lands, and each family was provided with just enough land to support itself (Shipek 1987:73-74).

Government schools were to provide technical training for Native Americans so they could find gainful employment, thus proving their ability to become peaceful and useful members of American society. Many of the schools located on reservation lands were contract or mission schools and often were run by the Catholic Church. Such schools received money from the Government for each attending student. Reflecting anti-papist sentiments, Thomas Jefferson Morgan, U.S. commissioner of Indian Affairs during Rust's tenure, did not approve of the Catholic influence on Native Americans and made written and public anti-Catholic statements (Morgan 1893; Prucha 1979; see Billington 1952). Morgan was an active member of the most influential Indian-rights movement in the nation, the Lake Mohonk Friends of the Indian Conference (Burgess and Hauptman 1975). For nearly twenty years, the Lake Mohonk group dominated governmental policies enacted toward Native Americans, and many of their policies were anti-Catholic.

Rust's years as a BIA agent, 1889-1893, were controversial because of religious and political friction with the tribes and complaints regarding his archaeological collecting, and it was during his tenure as an agent that conflicts between missionary and government schools on the California reservations came to the public's attention. There were numerous political squabbles

between established Mission Indian tribal leaders, who were Catholic, and separatist Indians, who doubtless were hoping to usurp the traditional political system with the help of whites (Beidler 1977:8-10; Bean 1978). Rust believed that for the southern California Indians to become accepted in society they needed to be educated in a manner commensurate with the experimental Carlisle Indian School in Pennsylvania. In advocating this position, Rust found himself at odds with the traditional, hereditary tribal leaders.

BIA policy supported breaking up traditional Native American power structures to discourage making Native Americans permanent wards of the U.S. Government. Believing that Indians must abandon their previous way of life, the Federal Government encouraged tribes to adopt Western culture, and those willing to do so were befriended by Rust. Probably in an effort to further divide the groups, Rust persuaded many southern California Indians to enroll their children in government schools and to break from hereditary tribal leaders, who kept their children in mission schools. To bring attention to these radical tactics and to their displeasure with him as an agent, a few Cahuilla Indian leaders incited public outrage toward Rust, particularly by focusing on his continued archaeological collecting. He came under public attack for obtaining artifacts from the Indians whose well-being he was supposed to be serving (Gilmour 1892). Rust went so far as to appoint his own representatives in lieu of some of the elected southern California Indian leaders, believing such individuals would not serve the groups well. These actions by Rust were an obvious attempt to dilute the traditional tribal power base. Rust resigned as Indian Agent on February 17, 1893, effective April 3, 1893 (Trever 1950).

During his tenure as an Indian agent, Rust was recommended for an official position to assemble an archaeological collection from California to be exhibited at the World Columbian Exposition in Chicago. Otis T. Mason, Curator of Ethnology at the Smithsonian

Institution, wrote that Rust was “the best man on the West Coast to prepare an exhibit of Indian products and implements intelligently” (Mason 1892a). He received enthusiastic endorsements from Frederick W. Putnam and Edward Drinker Cope with the hope that an agency or institution would hire him to compile a collection for the Exposition (Cope 1891). Rust, however, did not acquire such a post. Putnam charged Franz Boas with the responsibility of overseeing the Exposition’s physical anthropological exhibit, which featured “displays of craniology, neurology, and psychology” (Brown 1994:44). Putnam had suggested to Boas that Rust could assist the project by obtaining from southern California Indians “a very extensive series of measurements of full bloods as well as half breeds, and children as well as adults” (Boas 1891). It is unknown whether Rust assisted in this endeavor.

Establishing the Logan Collection: 1893

Rust decided to sell his personal collection of archaeological materials in the 1890s. The collection, an estimated four thousand artifacts, was a compendium of a lifetime of collecting and archaeological work, and it was sought by many of the foremost institutions in the United States. Frank Putnam, who was appointed head of the Department of Anthropology and Ethnography at the 1893 World’s Fair, tried to induce Leland Stanford to purchase the collection and hire Rust as a curator so that Stanford University could exhibit the collection at the Fair. He wrote Stanford,

I am desirous of having as complete an archaeological and ethnological exhibit as possible from California as part of the great ethnographical exhibition for which I am arranging ... It has occurred to me that I might secure your assistance in having the archaeology of California properly represented, and at the same time bring about an important collection for the Stanford University ... Mr. Horatio N. Rust, now Indian Commissioner

of California, is well known to me as an enthusiastic and able collector of archaeological and ethnological material ... I feel confident that should I succeed in securing your cooperation in this way, with the energetic work of Mr. Rust added, a far more important exhibit of the archaeology and ethnology of California could be made than could possibly be brought about in any other way. [Putnam 1891]

The Rust collection, though, would not be sold to Stanford but to Chicago millionaire, Frank G. Logan. Logan visited Rust at his Pasadena home in 1891, and for \$15,000, Logan purchased the archaeological and ethnographic collection. Logan arranged for Rust to exhibit the collection for him at Chicago's 1893 World's Columbian Exposition (Anonymous ca. 1893). Prior to sending the collection to Chicago, Rust allowed it to be publicly displayed at Throop University, now the California Institute of Technology (Anonymous 1892).

The Anthropological Building was one of the last built for the fair. The Logan Collection (Figure 4) was listed as Exhibit Number 27 and was "located in the northeast corner on the main floor and immediately to the left of the visitor as he enters the Anthropological building from the north" (Anonymous ca. 1893). According to Moorehead (1894b:17), "the Pacific Coast, south of the Columbia River, was represented by Mr. Rust in a complete series filling ten or twelve large cases." Other important archaeological collections at the Exposition were Richard Wetherill's collection of materials from Mesa Verde and Warren K. Moorehead's artifacts from the Hopewell Mound group. An exhibit by Ernest Volk presented stone tools he asserted were Paleolithic implements from the Delaware Valley, and a display by William Henry Holmes showed similar lithic items that he "claim[ed] ... stones which, when chipped to a certain form, were found unfit for the fashioning of implements and

were cast aside ... and that they are not true paleoliths, but unfinished or imperfect specimens" (Moorehead 1894b:17-18).

Rust reveled in the Exposition, traveling from exhibit to exhibit exchanging artifacts with representatives of other countries. With encouragement from Logan, he obtained artifacts from the Swedish exhibit (Eaton 1893) and discoidal stones from the Orange Free State (Rust 1875). Rust was appointed to the Board of Judges of the Anthropology Department by Putnam and served as its Secretary. The Rust/Logan collection received an award for the best archaeological exhibit. The entire collection was donated by Logan to Beloit College in Wisconsin, where he was a member of the Board of Trustees. The collection became the foundation of the newly established Logan Museum of Anthropology, where it is still used for exhibits and teaching purposes.

Rust took the opportunity while in the Midwest to attend the AAAS meetings being held in Madison, Wisconsin. He presented three papers before Section H at the meeting, including one on the Mission Indian maturation ceremony (Rust 1893). The *atulku* he had taken from Warner's Ranch was part of the exhibition at the 1893 World's Fair. In addition, Rust exhibited a variety of lithic materials to exemplify his papers, including a variety of stone adzes "illustrating the attachment of handles of bones and wood by means of sinew ... and asphaltum" (McGee 1893:432).

The Final Years: 1894-1906

After the Exposition, Rust returned to southern California and his nursery business. He specialized in propagating orange and lemon tree seedlings and growing date palms. He was well known for his remarkable rose bushes. One such bush reached a height of fifteen feet, had a diameter of twenty-five feet and was reported to have more than thirteen thousand mature roses (LeBaron 1902). This rose bush is the backdrop in the portraits Rust and his son

Edward, and of Rust's friend Jesse Benton Fremont (Figures 5 and 6).

Rust wrote several brief articles about his archaeological discoveries for newspapers and several magazines. The editors of *The American Archaeologist* noted that Rust "who is well known to readers of this magazine as a painstaking archaeologist is doing excellent work in the vicinity of Pasadena, California, where he resides. He has discovered no less than eight prehistoric village sites" (Snyder 1898:83). These eight sites are likely some of the sites he remarked upon in an article written in the Pasadena News (Rust 1899e). Among those mentioned in that

piece, Rust detailed a particular investigation he called the Buena Vista Street site. This was a large village site that occupied the vicinity "between the residence of P. M. Green and Rev. Merwin" (1899e: B28). According to his personal records, the site was in the area, east to west, from Fair Oaks Boulevard to Meridian Avenue, with the southern boundary at Buena Vista Street (Rust ca. 1902). The northern edge of the site was not identified.

Rust (ca. 1902) wrote that grading work conducted in 1897 had revealed the remains of a large village on adjoining property owned by David Raab. As per 1910 and 1920 U.S. Census records (U.S. Bureau of Census

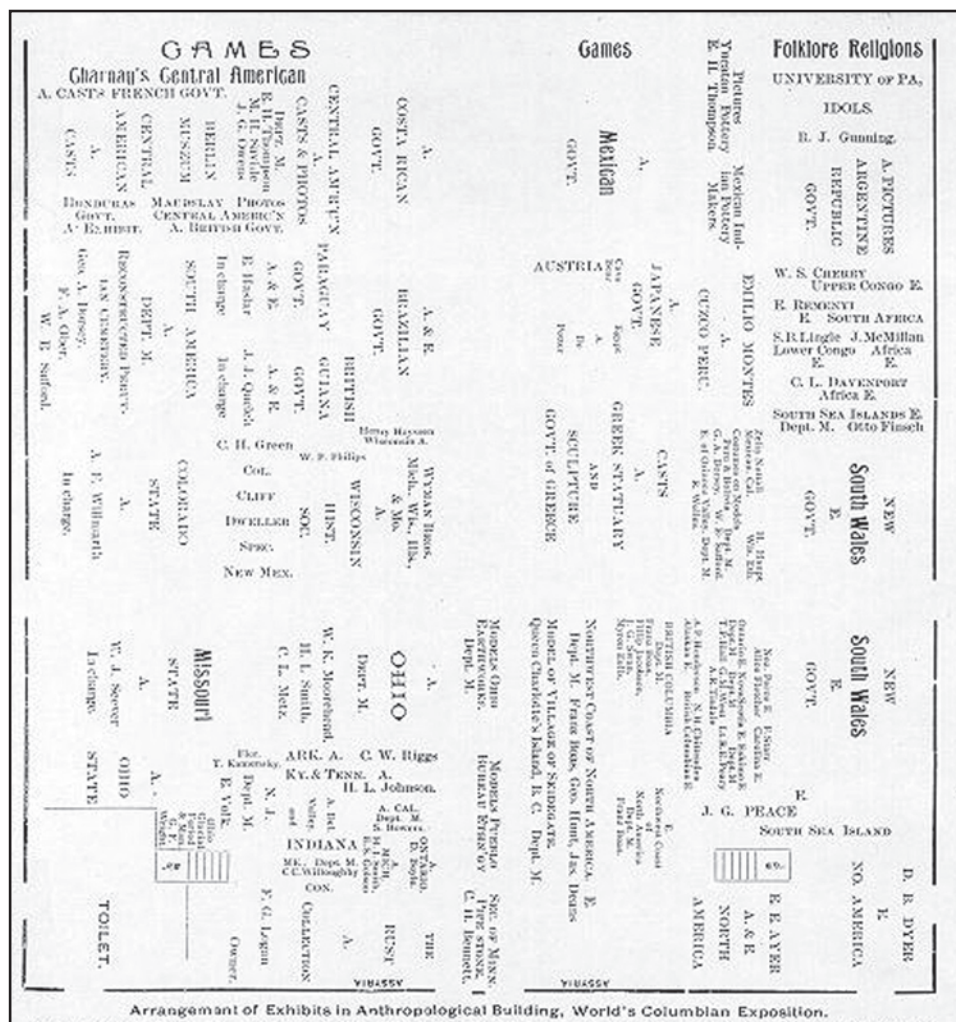


Figure 4. Arrangement of exhibits in Anthropological Building (from Moorehead 1894a).

1910, 1920) Raab's address was listed as being in the 1100 block of Buena Vista Street. An on-line database (Ancestry.com 2000) containing Los Angeles County directories for 1888 and 1890 indicates that Raab lived on the south side of Buena Vista Street near Fairview Avenue. Because of the 1897 discovery, Rust anticipated finding additional artifacts during roadwork on Buena Vista in 1898.

Rust worked with the laborers grading the road surface, telling them that they would likely uncover stone artifacts. He wrote:

... they soon began to find them after each ploughing and I spent much time in going

over the ground carefully and finding the specimens in situ. Whenever the plough struck a stone the men looked carefully and as a result our united efforts gave me 150 specimens of the implements of the earliest settlers of Pasadena. (Rust ca. 1902)

He wrote about the Buena Vista Street site work and its artifacts in *The Antiquarian* (1897c) and in *The American Archaeologist* (1898a). An accompanying photographic plate in the later article (1898a:75) featured some of the ground stone found at the site, including several discoidals and cog stones. This same plate can be seen in Holmes (1902) (Figure 7), as well as another photograph of many of the other recovered



Figure 5. Large rosebush in the yard of Horatio Rust. Rust (standing at right) and his son Edward.

artifacts (Figure 8). At the request of William Henry Holmes (Rust 1899d), Rust sent many of these objects to the Smithsonian (Accession # 34818) and gave some of the artifacts to the Field Museum (Accession 610). Many of Rust's Pasadena area finds likely are in the ca. 1902 photograph of Figure 9.

In 1897, Rust made a trip to the Channel Islands (Rust 1897d), probably as part of an expedition from the Pasadena Academy of Sciences (Snyder 1897). He published a pamphlet showcasing the 1200-piece collection he gathered on San Nicolas and San Miguel Islands. He also published a brief article about the work on San Nicolas in *The American Archaeologist* (Rust 1898b). In correspondence with George Dorsey (Rust 1900a) of the Field Museum, Rust attempted to convince Dorsey to purchase the collection. He later discussed the possibility of selling part of the collection to a group in Berlin, but it is unlikely that this ever occurred. The collection

was still in Rust's possession a few months prior to his death (Rust 1906c; Dorsey 1906; see also Rust 1907), although its present disposition is unknown.

Also in 1897, Rust traveled to the Arizona Territory to see a Hopi Snake Dance ceremony (Figure 10). Among those he invited to join him were photographers J. C. Crandall and A. C. Vroman, and Leontine Lowe, the wife of noted inventor and balloonist Thaddeus Lowe. During their travels, Rust's party encountered Jesse Fewkes of the Smithsonian Institution, who also had come to see the Snake Dance at Walpi, and they camped with him before making their way up the mesa. Southwestern avocational archaeologist Richard Wetherill also was present at this particular event. In McNitt's (1966:91) biography of Wetherill, he relates that because of Mrs. Lowe's abundant physique it was necessary for her to be brought up the mesa on a litter carried by Hopi men (Figure 11). The



Figure 6. Jesse Benton Fremont in front of a large rosebush in the yard of her friend, Horatio Rust (from Le Baron 1902).

occasion was made even more memorable with her cursing all the while.

Rust penned several articles for newspapers back East regarding the adventures on this journey. Some of the activities he recounted dealt with their visit with a group of Navajo near Bitahooche, their stay at the home of trading post operator, Thomas V. Keam, (Figure 12), their sojourn with the Hopi, and their explorations of the Petrified Forest. He wrote an article for the *Chicago Daily Inter-Ocean Newspaper* (Rust 1896a) describing excavations in ancient Arizona cliff dwellings and his trip into the caves near the Grand Canyon. Rust donated a collection of artifacts recovered during these excavations to the Logan Museum of Anthropology (Rust 1897e). With the collection he sent a catalog of the materials and notes regarding the excavation area at the rim of the Grand Canyon and ethnographic

data on the Mojave Indians living near Needles. In 1896, Rust published a short piece in the *Land of Sunshine* (Rust 1896b) on the Snake Dance; it was accompanied with photographs taken of the ceremony by Vroman. In Rust's personal papers are his travel journals that contain a variety of observations and notes on the Hopi and their villages (Rust ca. 1893b) and data on pottery making techniques of the Mojave (Rust ca. 1898).

In 1899, Frederick Starr from the University of Chicago wrote to Rust (Starr 1899a) asking him to "subscribe for my album," probably *Starr's Indians of Southern Mexico* and *Notes on the Ethnography of Southern Mexico*. Rust apparently suggested that if the University would reimburse him for shipping they could exchange a basket hopper mortar for the publications, to which Starr and the University agreed (Starr 1899b). Starr explained to Rust that

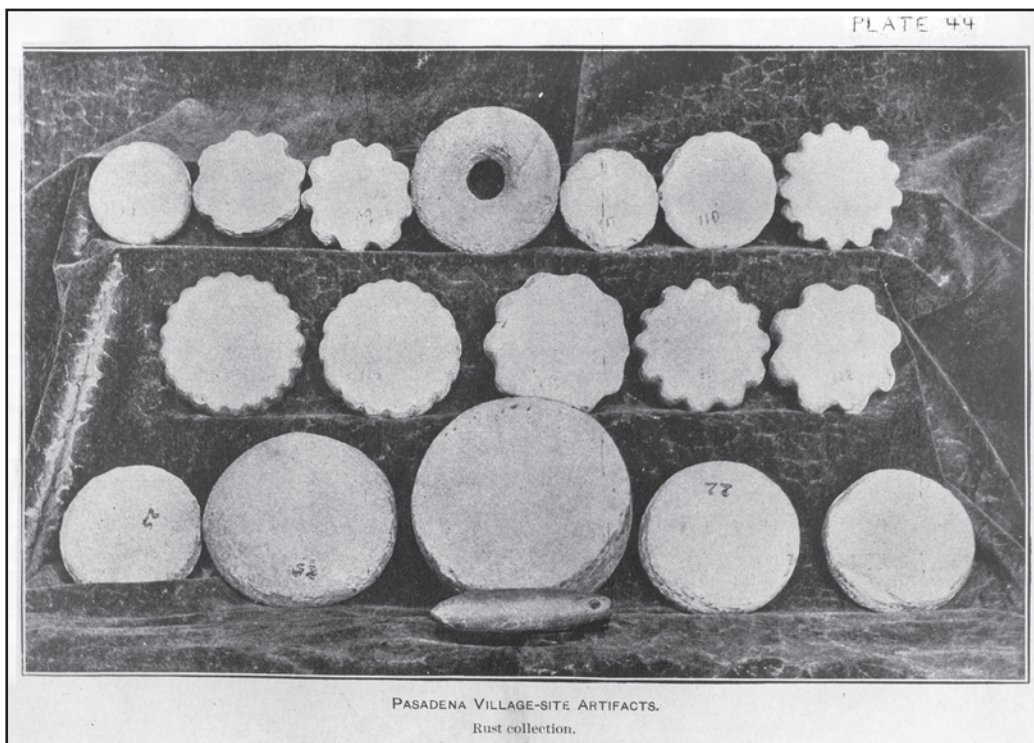


Figure 7. Plate 44 reproduced from Holmes (1902) showing mainly coggled stones and discoidals discovered by Rust at the Buena Vista Street site that once overlooked South Pasadena.

“the University has rarely purchased anything for the Department” and that his contribution from California could give him an opportunity “to urge” the University to collect more from that area (Starr 1899c). Rust also sent Starr “other specimens and the newspaper clippings relative to them” (Starr 1900).

Rust had often written the Smithsonian requesting the opportunity to collect for the Museum, and around 1899 William Henry Holmes and Rust began discussing making a collection of California Indian materials. Monies for the National Museum to acquire collections were difficult to obtain. Thus, Holmes informed Rust in July 1899 that the funds he had set aside for the project were required for another purchase, but “as soon as this year’s appropriation is available I shall make arrangements to have a small sum ... set aside for your trip” (Holmes 1899). By January 1900, Holmes had procured some financial

backing from the BAE, but it would be necessary for Rust to expend his own resources up front “until you can present a statement of expenses and purchases. The Treasury will not ... advance money until a receipt is given and the things or services in sight” (Holmes 1900).

Rust was formally commissioned by the Smithsonian Institution to make collections among the Southern California Indians in 1900 and again in 1901. He took photographs and recorded on a map the location of the areas where he collected the materials, which are on file at the National Anthropological Archives (Ms. # 7398). He collected archaeological items and over one hundred baskets and raw materials (Rust 1902; Powell 1904). “I gathered all I could find of their manufacture and materials for which the articles were made, labeling each piece” (Rust 1901). Otis Mason (1901) later told Rust, “you just ought to see it. [The collection] is

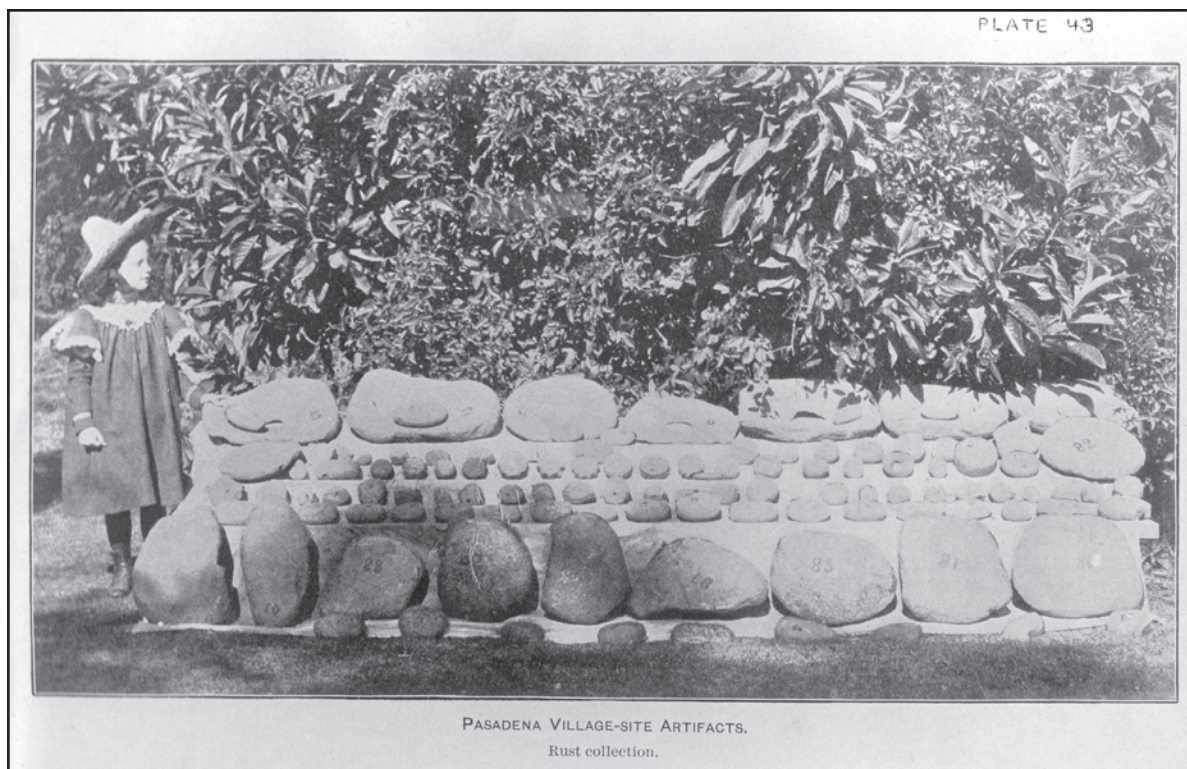


Figure 8. Plate 43 reproduced from Holmes (1902) labeled “Pasadena Village-Site Artifacts. Rust Collection.”

mounted and labelled in the first hall as you enter the National Museum and has your name on it.”

Rust reported on an assortment of ethnographic data from these excursions, including manufacturing techniques of ceramics and baskets, assorted ceremonies, and folklore and “superstitions” (Rust 1900b).

I have also made some notes of the following subjects: making baskets and materials used, pottery, spinning and weaving, of a mourning festival enacted at Santa Rosa, dressing deer skins, cooking mescal and acorns, of a burial place, of marriage customs, Indian game laws of olden times, cigarette making and use, some legends of a big snake who swallowed an Indian, of a squaw who was drawn down into a big spring near the desert

where she lived under the water and bore children who were seen on the surface of the water, of the origin of paper, of an Indian who was a famous hunter and could fly and discovers the mountain sheep, killing all he wanted ... I made notes of such matters that interested me, feeling that such matters were being allowed to pass unnoticed and unless someone saved it it would soon be out of reach. [Rust 1903]

The Field Museum also was considering the use of Rust’s collecting services during this time. Unfortunately, Dorsey wrote in 1901 that the Museum was unable to engage Rust since “I just had a talk with Mr. Holmes of the National Museum and I infer from what he said that he is not yet ready to dispense with your services, that being the case of course it would not be



Figure 9. H. N. Rust at his home with members of the South Pasadena Woman’s Improvement Association, ca. 1902. The second from the left is Jesse Benton Fremont. Note the significant amount of ground stone under the enormous rose bushes that covered Rust’s yard. (Image courtesy of the Archives at the Pasadena History Museum, Pasadena, California.)

the proper thing for us to make overtures to you to do work for us" (Dorsey 1901).

Fredrick W. Putnam suggested that Rust could do some collecting work for the University of California in 1903 (Putnam 1903b), but this arrangement never materialized due to a lack of funds. Rust's last attempt to secure a professional position was his request for an appointment to collect representative artifacts from the southern California region for display at the 1904 Louisiana Purchase Exposition (Rust 1903); however, this again proved to be a fruitless endeavor. He was invited to join the Archaeological Institute of America in 1904 (Lummis 1904), but it is not apparent whether he did so. In 1905, Rust donated several pieces of worked shell that he had collected from San Miguel Island to the Peabody Museum (see Rust 1907). He continued to address scientific organizations and to write short articles on anthropological topics. He hosted several

well-respected anthropologists at his home, including George Dorsey, William Henry Holmes, Fredrick W. Putnam, and Zelia Nutall.

In December 1903, Rust was invited by the Tournament of Roses Association to enter a delegation of Native Americans for the annual New Year's Parade (Rust 1904b; Apostol 1979/1980,). At the age of 77, Rust went to Arizona to gather a group of Navajo Indians for this purpose. A party of approximately thirty individuals was selected. In Pasadena, arrangements had been made for the group to camp at Tournament Park. The men and women were dressed in their finest clothes. A float (Figure 13) decorated with blankets and other items of Native American manufacture was reserved for the women and children who carded and spun wool and wove blankets on looms (Rust 1904b). The men (Figure 14) were given rented Indian ponies to ride that were outfitted with their own hand crafted



Figure 10. "Around the Campfire," 1897. Rust is fifth from the left. Photo taken on the occasion of a trip to the Arizona Territory to witness the Hopi Snake Dance. (Photograph by A. C. Vroman, reproduced with permission of the Pasadena Public Library, California.)



Figure 11. Leontine Lowe on her way to see a Snake Dance at Walpi, 1897. Horatio Rust is just to the right of Mrs. Lowe. (Photograph by A. C. Vroman; courtesy John Haug Collection.)

saddles, silver ornamented bridles, and blankets (Shoop 1952¹; Gilbert 1954; Apostol 1979/1980). The following day the Navajo visitors were taken to view the Pacific Ocean at San Pedro Harbor where they took a tour of a passenger boat bound for Catalina Island. When the group reached the beach they were overwhelmed by the quantity of water before them (Rust 1904b). A ceremony was conducted by a Navajo elder who said prayers and scattered corn meal on the waves and sand (Gilbert 1954; Apostol 1979/1980). Rust had brought along a demijohn so that an elder could take some ocean water home, but many of the individuals in the party desired ocean water for themselves. Accordingly, Rust acquired every empty bottle

he could find so that everyone who wished to take sea water back to Arizona could do so (Rust 1904b). Rust took the Navajos to church for Sunday services, after which the group was escorted to the train to return home. Rust submitted to the Tournament Association a typewritten report on the entire episode (Shoop 1952).

Rust often corresponded with Alfred Kroeber regarding California Indians. He published three more articles in the *American Anthropologist* in 1905 (see Kroeber 1905a) and 1906 (1906a, 1906b; see Kroeber 1906). Kroeber invited Rust to become a member of the American Anthropological Association (AAA) (Kroeber 1905b), and in 1906, Rust actively promoted

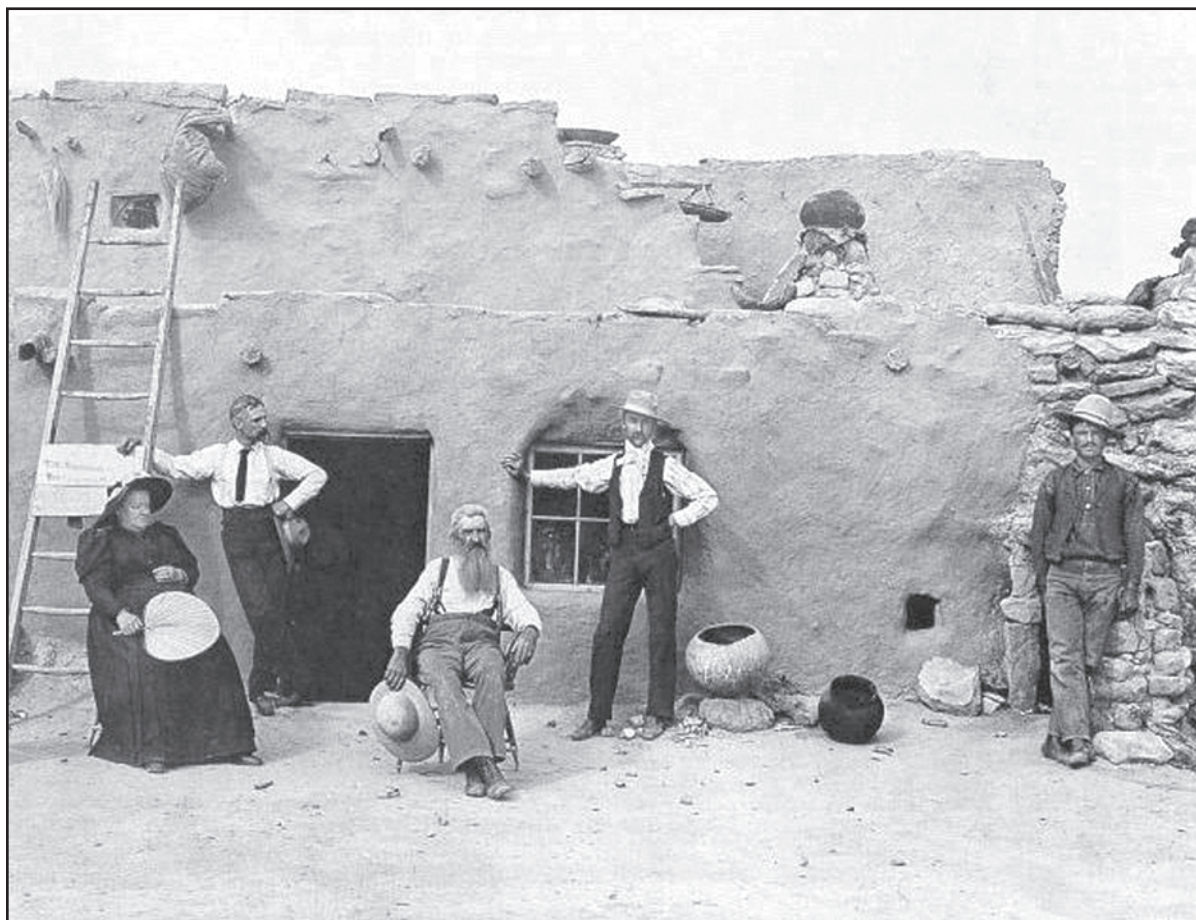


Figure 12. "Our Home on the Mesa," 1897. Party is outside of Keam's Trading Post. Rust is third from the left. (Photograph by A. C. Vroman; reproduced with permission of the Natural History Museum of Los Angeles County.)



Figure 13. Photograph of the float carrying Navajo women and girls who were demonstrating the various stages of blanket making at the 1903 Tournament of Roses Parade. (Image courtesy of the Archives at the Pasadena History Museum, Pasadena, California.)



Figure 14. Photograph of a Navajo man on horseback with a handmade blanket, saddle, and silver bridle at the 1903 Tournament of Roses Parade. (Image courtesy of the Archives at the Pasadena History Museum, Pasadena, California.)

in southern California the AAA meeting, which was to be held in San Francisco. Kroeber was so satisfied with Rust's efforts that he wrote Rust that he made "a first rate press agent" (Kroeber 1905c). Rust attended the San Francisco meeting and presented a paper. He died a few months later on November 14, 1906, at the age of 78. His obituary was listed in the New York Times and other national newspapers and appeared in the *American Anthropologist* (Anonymous 1906:737-738). His last paper was published posthumously in 1907 in the *American Anthropologist*. Alfred Kroeber (1907:153) wrote that Rust "was a careful student and an indefatigable collector, who collaborated with many of the anthropological institutions of the country. His loss will be keenly felt in archaeological circles."

Other Notable Avocationalists: Contemporaries of Horatio Nelson Rust

Rust's activities as an avocational archaeologist were shared by others. The reader should understand that, "even in the late nineteenth century being a scientist in America was still as much a matter of character and integrity as one of specific academic or laboratory training—especially in a field like anthropology" (Hinsley 1976:41). Assistance from private individuals was actively encouraged in archaeology by institutions during the 1800s. These institutions relied on collectors for the benefits of their experience and, more often, their generosity.

Spencer Baird was driven to increase the size of the Smithsonian's holdings (Hinsley 1981), and he actively cultivated ties with many collectors to achieve this objective.

Every effort was made to enlist the services of occasional correspondents who wrote to the Smithsonian for information. A letter giving the particulars desired would perhaps have a postscript asking whether there were

any Indian remains to be found in the locality ... In a great many instances these letters bore important fruit. [Cockerell 1906:72]

Two of the avocationalists with whom Baird developed relationships were James Swan and Edward Palmer.

James Swan

James Swan was born in Massachusetts in 1818 (Kovalenko 1998). He left the East Coast in 1850 and headed for California. Eventually, he moved to Washington Territory where he held a number of jobs, including notary, newspaper correspondent, ticket agent, oyster farmer, and probate judge (Cole 1985:15). He wrote a book in 1857 about his life in Washington, which included information on the mixed Chinook-Chehalis people of Willapa Bay (Suttles and Jonaitis 1990:73).

Swan, as the secretary to the territorial delegate, met the Assistant Secretary of the Smithsonian Institution, Spencer Baird, in Washington, D.C., in 1857 (McDonald 1972:32). Cole (1985:14) noted that while Swan was working as a teacher in an Indian school at Neah Bay he read George Gibbs' 1862 circular on archaeological collecting. This inspired Swan to gather items for the National Museum, and he began acquiring small ethnographic collections and natural history specimens. Swan also began corresponding regularly with Baird, Gibbs, and the first Secretary of the Smithsonian, Joseph Henry (Cole 1985).

Swan wrote to Baird "letter after letter" telling him of "great collecting opportunities" in the area and stated that he could acquire excellent materials for the museum if the government "would allow him a salary and sufficient funds" (Cole 1985:17). Since the Smithsonian had little money to devote to acquiring artifacts, it was necessary for collectors to pay for all expenses incurred to assemble and ship collections and then wait to be reimbursed. Baird, in an effort to encourage

Swan to continue collecting, attempted to have him appointed as an Indian agent (Cole 1985; McDonald 1972). This appointment did not materialize, although Baird told Swan that whatever he collected and sent free of charge would be welcomed by the Museum (McDonald 1972:109).

Swan recorded invaluable first hand descriptions of Makah and Haida customs, vocabulary, and art (Renker and Gunther 1990). Further, McDonald (1972:29) pointed out that he contributed information regarding medicine men and Chinook burial customs for Dr. Henry Rowe Schoolcraft's *History of the Tribes of the United States (1851-1857)*. While in Neah Bay, Swan wrote *The Indians of Cape Flattery: At the Entrance of the Strait of Juan de Fuca, Washington Territory* (1870), the first of a series of memoirs and papers he produced for the Smithsonian (Cole 1985:16; Kovalenko 1998:14).

Swan wrote to Baird about Europeans making collections from the area, which upset Baird who "had always been sensitive to foreign collectors" (Cole 1985:37) and had sought some way to prevent the removal of cultural materials from the United States. Baird was disturbed to discover that Swan was obtaining specimens for an Austrian scientist. To sway Swan from continuing to assist foreign collectors, Baird "dangled the opportunity" (Cole 1985:19) to make a collection for the 1876 Centennial Exposition in Philadelphia. When Congress appropriated funds for that Exposition, Baird was able to formally commission Swan specifically to collect ethnographic material on the Northwest Coast (Hinsley 1981; Cole 1985). Swan made an impressive collection totaling approximately five hundred pieces, including a sixty-foot canoe.

Swan made two more collections when Baird hired him in 1882 and in 1884. After Baird's death in 1887, Swan "began to be passed over by the new men at Washington" (Cole 1985:46). Swan's last endeavor was for the 1893 Columbian Exposition for which

he made small collections for Franz Boas and for the Washington State Exhibition (Cole 1985; Kovalenko 1998). Swan died at the age of 82 in 1900.

Edward Palmer

Edward Palmer was another notable avocationalist who found an advocate in Baird. Palmer was born in England in 1831 and immigrated to the United States in 1849 (Hinsley 1981). He became one of the nineteenth century's major collectors of botanical and natural history specimens (see Jeter 1989:174). Palmer was noted for his extensive and frequent travels throughout the American Southwest and Mexico. Palmer possessed a limited background in medicine and was an assistant surgeon in the United States Army. From 1865-1867, he was attached to a variety of recently established military posts in Arizona Territory and is noted as having sent to the Smithsonian vocabulary lists he compiled from the Hopi, Tewa, and Zuni (Fowler and Matley 1978).

In 1868, he was appointed an Indian Agency doctor in southwestern Oklahoma. Shortly after his arrival, Palmer's commanding officer criticized his "lack of interest in his Indian charges, and his great absorption in collecting specimens" (McVaugh 1956:36). By 1869, Palmer had been commissioned to collect full time for the Smithsonian, the Department of Agriculture, and the Army Medical Museum (McVaugh 1956). Baird commissioned Palmer to collect ethnographic and archaeological specimens from the Southwest for the 1876 Centennial Exposition (Cole 1985). Additionally, he collected for the Peabody Museum at Harvard, and he was "listed regularly in the [Smithsonian] annual reports of the 1860s and 1870s as a major contributor to ethnology" (Hinsley 1981:69).

Baird sought out Palmer in 1881 to work as part of the BAE's ambitious Mound Survey (Meltzer 1985). From 1881 through 1884, Palmer traveled through

Alabama, Arkansas, Georgia, Indiana, Mississippi, North Carolina, South Carolina, and Tennessee documenting and excavating mound sites. Palmer chronicled his work through notes, daily journals, and monthly reports to Washington, and for a short time, he was assisted by an Afro-American draftsman in drawing 36 mound sites (Jeter 1989). He recorded provenience data and assigned field specimen numbers to the recovered artifacts. According to Jeter (1990:369), Palmer's collections were atypical for that time period in that he amassed items such as faunal remains, potsherds, lithic debris, and daub fragments, in addition to whole artifacts.

Palmer wrote at least 17 articles relating to his archaeological and ethnographic work, and the results of his work were well documented by William Henry Holmes and Cyrus Thomas in several Smithsonian publications (Jeter 1990). After Palmer left the BAE, he returned to collecting botanical samples for the Department of Agriculture and later became "an 'expert' with the Bureau of Plant Industry" (Jeter 1990:71). Palmer died in 1911, and Walter Hough (1911: 173) wrote in Palmer's obituary for the *American Anthropologist* that, "His ethnological material, to which he constantly added, is accounted among the most valuable in the United States National Museum. Except in the earlier years, he did not publish his researches, being satisfied with the rewards of a diligent collector, who does his part well in adding to the stores of science." Hinsley (1981:71) states that Palmer "typified the scientist-explorers of post-Civil War anthropology, who collected materials with which others might build a science."

Advocated by the likes of John Wesley Powell and Otis Mason as a science that encouraged participation from the public, archaeology drew the interest of all kinds of individuals. Two other remarkable avocationalists were Alexander Chase and Clarence Moore. Each made valuable contributions to archaeology, although they came from different social backgrounds,

which, from a monetary standpoint, impacted their ability to pursue cultural studies.

Alexander Chase

Alexander Chase, the son of a minister, was a surveyor for the US Coast and Geodetic survey from 1863 to 1878. His work took Chase to the northern California and southern Oregon coasts, and as a member of this survey, he met Native Americans and excavated several archaeological sites. He is the first person to excavate in this area and publish the results. Chase published two anthropological articles, kept personal field notes, and made sketches and photographs of the surroundings, people, and artifacts (Lyman 1991).

In Chase's first publication, printed in 1869 in *The Overland Monthly* magazine, he wrote of his visit to the Siletz Reservation in Oregon. In this work he discussed marriage and burial practices, the types of tattoos on women and men, concepts of wealth and money, and the general circumstances of the people of the reservation. In an unpublished manuscript sent to the Smithsonian, Chase (1873) described in detail the findings from his archaeological excavations of several shell mounds. He provided an account of the burials encountered, furnished various cranial measurements, and in traditional classificatory-descriptive fashion extensively described the associated artifacts. Also in this work, Chase expounded upon many ethnographic observations of the northern California and southern Oregon tribes, such as ways of fishing, use of tobacco, food preparation, tool and weapon manufacture, and several legends (Lyman 1991).

In 1879, Chase suffered from a stroke that left him partially paralyzed. This physical condition undoubtedly must have affected his ability to earn a living. He corresponded with John Wesley Powell and Spencer Baird and often requested the opportunity to make collections for them. Chase settled in the American

Southwest and received some funds from Baird to conduct excavations in Arizona (Lyman 1991).

During the 1880s, Chase did not have the money to ship the materials he had been gathering for the Smithsonian, and in several letters he asked Baird for help in this matter. Eventually, Chase solicited assistance from Powell, although information regarding his success is unavailable (Lyman 1991). It was necessary for Chase, as it was with Rust, to seek other employment to make a living, although both would have preferred to make archaeology their profession.

Clarence Bloomfield Moore

In sharp contrast to the financial difficulties experienced by Chase, there were the more fortunate circumstances of Clarence Bloomfield Moore (1852-1936). Moore is one of the most prolific turn-of-the-century avocationalists; he worked extensively in the southeastern United States. Moore was from a wealthy Philadelphia family and was educated at Harvard. As a young man, he traveled extensively through Europe, South America, and Asia (Brigham 1937). He worked at the family business, the Jessup and Moore Paper Company, and retired in 1899 to spend the rest of his life doing research (Brigham 1937). Like Rust, Moore kept notes of his work, published the results of his findings, and provided many museums and institutions with the archaeological materials he recovered. He was a member of the American Antiquarian Society and numerous other archaeological and historical associations (Brigham 1937), and he became an acknowledged authority on the prehistory of the Southeast.

During the 1870s, Moore spent winters in Florida where he made observations on his discoveries from a shell heap along the St. Johns River in 1873 (Murochick 1990). Jeffries Wyman, the first curator of Harvard's Peabody Museum, had examined the shell mounds along the St. Johns in the 1860s and 1870s. Murochick (1990:64) noted that "it is entirely pos-

sible, though not directly stated anywhere, that Moore was working with ... Wyman on the St. Johns shell heaps ... as it was known that Wyman was also in this area at the same time." Moore returned to Florida with a fully organized expedition to more completely investigate these shell mounds between 1892 and 1895. "Moore's first publication of his results was in the ... *American Naturalist*, the same forum in which Wyman published his own ... research on the Florida shell mounds" (Knight 1996:3).

Moore financed his own work and excavated annually for many years by travelling the rivers and streams of the southeast on his sternwheeler boat named the *Gopher of Philadelphia*. He would select an area to survey each season and used the boat as a center of operations. During these field seasons, Moore, a trained crew of 13 excavators, and five supervisors lived aboard the *Gopher* (Knight 1996:3). When necessary, Moore employed locals as laborers to dig test pits and to backfill the excavated areas. Dr. Milo Miller accompanied Moore and acted as the secretary of the expeditions and provided technical assistance with the excavation of burials and osteological analysis (Bense 1994:29; Knight 1996:3)

Moore worked under contract to the Academy of Natural Sciences of Philadelphia. He kept field notes of the progress of the archaeological work and recorded his observations, which can be found at the Huntington Free Library in New York. Further, Moore was regarded as a careful excavator, remarking on the general environs, the construction of mounds, the color and types of soils, and the general provenience of his discoveries. He was known to utilize a variety of excavation techniques, such as "trenching, troweling, and occasionally screening the material from his excavations" (Knight 1996:16).

Moore's goal was to ultimately assemble distributional data on ancient earthworks, burial practices, and artifacts from sites on all southern waterways accessible

to the *Gopher of Philadelphia*" (Knight 1996:4). By assembling large samples of associated funerary objects and human remains, he was able to draw conclusions regarding cultural practices and traits. For example, as a result of his work at the Moundville complex in Alabama, Moore determined the following: (1) the site dated to a period prior to European contact; (2) it functioned as an important religious center; (3) there were obvious class distinctions between individuals based on the locations and contents of graves; and (4) the overall shapes of the mounds were indicative of their function, and they were specifically arranged (Knight 1996).

At his own expense, Moore published the results of his work through the Academy of Natural Sciences, which received the majority of the recovered collections. He restored and photographed many the artifacts and used the photographs as figures in his books. He distributed his published works to many major institutions and to colleagues. Moreover, he sought out technical expertise from a variety of professionals to assist in interpreting the data. Among those consulted were National Museum scientists Drs. Ales Hrdlicka and George Merrill for osteological and microscopic mineralogical analysis, Dr. Harry Keller of the Academy of Natural Sciences for chemical residue analysis, and Frederick W. Putnam for iconographic identification (Knight 1996:11).

Like other avocationalists of his generation, there are mixed opinions of Moore's work among modern scientists. According to Milanich (1994:5), he "did excavate carefully ... kept respectable notes ... and was ... an astute observer, noting differences in types of mounds, as well as the artifacts." Contemporary scholars often criticize Moore for focusing his efforts on cemeteries and burial mounds. Conversely, Moore is credited with having saved a tremendous amount of data from his excavations of sites that may have been looted or otherwise lost (Bense 1994; Milanich 1994).

Discussion

Unfortunately, recent scientists have largely overlooked the efforts of early avocationalists primarily because the standards under which they worked are currently considered substandard. Each of these amateurs invested a tremendous amount of effort into their archaeological pursuits. Additionally, their intentions appear to have been scientific—to document, preserve, and understand Native American cultures. The experiences of each person profiled above denote meaningful contributions to the growth of American archaeology.

During their lives many of these men were accepted as experts in the geographic regions where they worked, and they appear to have been well regarded by their peers. Nearly all had direct contact with Native Americans and recorded ethnographic data, and the work of both Chase and Swan provides historically significant information on Northwest coast tribes that previously had had limited contact with Europeans. Rust, Moore, and Palmer each generated a significant amount of archaeological data over a vast geographic area. All of these avocationalists published articles on anthropological topics, and with the exception of Moore, each solicited work or sought to acquire positions that would allow them to collect on a full-time basis. The collections they generated were sizable and representative of the aboriginal cultural history of the areas in which they worked. Further, nearly all of the collections generated by these individuals were placed in museums.

The prerequisites for being an archaeologist during the nineteenth century were not well defined. It appears that on a very basic level, those who excavated with scientific purpose, recorded provenience data, presented their findings in a scholarly manner, and were individuals of principle were considered archaeologists. Modern archaeologists often fail to recognize that the work of these avocationalists was accepted under the

established parameters of the period and praised by the authorities of the field. As in modern archaeological science, these gathered data were made accessible for review and further study through published scholarship and by placement of collections with museums and academic institutions. The change in opinion regarding the quality of their work appears to have occurred as archaeology became professionalized and the participation of avocationalists diminished. The information available to create the brief biographical sketches presented here suggests the potentially useful existence of underused and overlooked quantities of information in the form of personal journals, field notes, and museum records. These data may allow important reevaluations and reinterpretations of the cultural past.

Summary and Concluding Remarks

Horatio Nelson Rust (1828-1906) was an avocational archaeologist who lived and worked in an era when persons not formally trained in science were encouraged to participate in the pursuit of anthropological knowledge. His methods and motives are best understood within the context of the views and opinions of his time. Rust's entire archaeological career occurred within the Classificatory-Descriptive period (1840-1914). Spanning nearly three-quarters of a century, its hallmarks were the detailed description of archaeological materials and the fundamental classification of such items (Willey and Sabloff 1980:34).

The study of American prehistory during the 1800s was affected by the popular belief that rudimentary, loosely formed social groups evolved into complex, highly stratified cultures. Most people viewed Native American culture as static and primitive. Much attention turned on artifact types so as to describe and arrange universal stages of cultural development. Archaeological specimens were assembled into collections in order to preserve the most extensive array of representative artifact types possible.

The general requirements for scientifically gathering an archaeological collection were to note the location and depth at which an artifact was found and to describe the item. Artifacts customarily were organized by materials/types and classified into general categories. These categories often were broad industry classes such as basket making and ceramic production. That Rust worked within the main principles of the Classificatory-Descriptive period is especially clear from an autobiographic sketch he wrote while at the 1893 World's Exposition. He stated that he had visited "nearly all the U[nited] States as well as Mexico and Canada in his pursuit of comparative archaeology. In this way he has accumulated choice specimens of most of the Indian implements of this country" (Rust ca. 1894b).

Rust's preoccupation with archaeology, which began in his youth as a hobby, became a defining part of his life. He spent more than fifty years in archaeological pursuits that took him across much of the United States (Figure 15) and into Canada and Mexico. Rust went out of his way to place himself in direct contact with Native American groups and attempted to learn about all aspects of their societies as well as to collect and preserve their material culture. In the United States this interest took him from the northeastern states across the continent to California. His last collecting trip was to Arizona when he was 77 years old.

Rust regularly wrote and consulted with numerous important individuals in archaeology—Alfred Kroeber, William Henry Holmes, Frederick W. Putnam, Spencer Baird, and Otis Mason. The duration of this correspondence often lasted many years. Further, the content of the letters evidence that these men recognized Rust's interest in archaeology and respected his work. In 1897, he was described as "an Archaeologist of national reputation" (Snyder 1897:330) and was a well-regarded authority on prehistoric cultures by the scientific community. Otis Mason counted Rust as "one of my dear friends" adding that, "we have

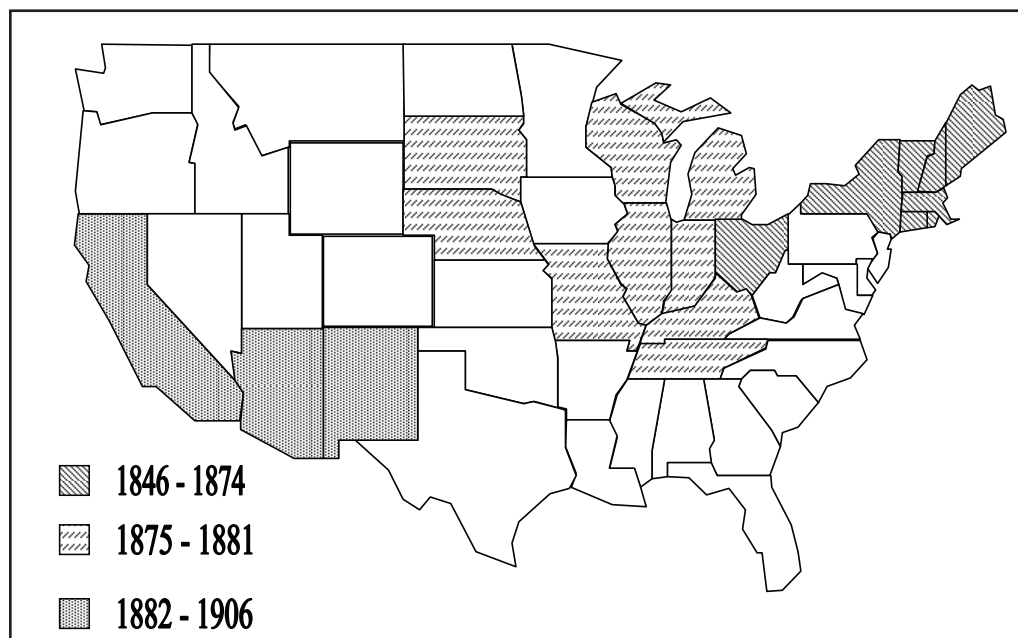


Figure 15. Geographic areas in the United States where Rust excavated/collected.

published papers of his and he would be an excellent cohort ... the work is expert” (Mason ca. 1891).

Rust was a member of the two most significant scientific associations of the time, the American Association for the Advancement of Science and the American Anthropological Association, as well as numerous local scientific organizations. He participated in regional and national scholarly forums, presenting before his peers the findings of his archaeological work (Appendix 1). His archaeological experiences and his archaeological collections were the basis of lectures given to benefit civic and charitable organizations. He published twenty-two journal/magazine articles, mostly on anthropological topics (Appendix 2), and at least a dozen newspaper articles on his findings. He provided sources of comparative ethnographic data, diaries, and inventories that remain useful, if largely untapped.

Rust’s major contribution to American archaeology was the assembling of a significant amount of archaeological material and placing those collections

and attendant notes in museums. Certainly, there were archaeologists of the time who were more thorough scientists than Rust, but few worked on the same geographic scale. He made at least five major archaeological collections, four of which are still largely intact and at the original purchasing institutions—Yale University’s Peabody Museum, the University of Pennsylvania’s University Museum of Archaeology and Anthropology, Beloit College’s Logan Museum of Anthropology, and the Smithsonian Institution (Appendix 3). Each of these four museums retains original inventories and in some instances Rust’s notes and correspondence, which contain valuable data regarding the artifacts, their archaeological context, and their recovery. Together the collections represent approximately 10,000 artifacts from North America. There remains much research value in these early collections. Too often, modern researchers avail themselves only of the artifacts in the collections, while the accompanying records are overlooked or dismissed. These documents may contain basic provenience data, first-hand ethnographic notes, and descriptive

information that are invaluable for cultural historical reconstruction.

In 1893, the year of World's Columbian Exposition, Rust was already 65 years old and had been excavating and collecting for decades. When he arrived in Chicago, he was welcomed as a peer by the elite segment of the anthropological community. Yet today, avocational archaeologists from that era are vilified for not collecting enough data and for the manner in which those data were collected

Archaeological collections made before the turn-of-the-century generally are superficially dismissed or rejected as having no scientific research value mainly for two reasons: (1) few have or retain the type of provenience data modern scholars would gather and (2) there is the inability to adequately place material in its proper context. Placing an artifact collected during the 1800s within a three-dimensional context is possible, but the information is not as detailed as preferred by contemporary scientists. Inserting prehistoric artifacts into a cultural context was not an aim that became commonplace until the 1900s. McViker (1989:123) pointed out that with the popularization of cultural relativism and inductive methods, archaeologists began to view the cultural context of archaeological materials as more important than the individual artifacts. Moving attention away from the artifact to a more holistic view of cultures was a significant shift in anthropological thought that still impacts modern interpretation. Too often researchers uniformly repudiate early collections because the model under which they were generated is no longer considered valid.

Within the available guidance provided by circulars such as Gibbs', Rust recorded the minimal amount of suggested data. Further, he worked during an age when there was little thought of compensating Native Americans for their belongings and the artifacts of their ancestors. His techniques were academically unrefined by modern standards but equivalent to those

of his contemporaries. Rust documented his work, interviewed native informants, placed collections in public institutions, and reported on his findings. Surely, he subscribed to the prevailing attitudes of his day that Native Americans were on an evolutionary level beneath his own, an attitude that certainly would have affected his interpretations and collecting methods. Some of his actions may be suspect, but his methods of acquiring artifacts were by no means out of the ordinary for the times.

Finally, contemporary archaeologists generally are not trained to work with old museum collections and primary documentation, and as a result, such materials are neglected. Without a basic understanding of the development of American archaeology and what were acceptable methods of excavation and recordation during the nineteenth century and the value of accompanying museum documentation, most early collections will continue to languish. It is necessary for archaeologists to return to early collections with a less encumbered sense of the history of their own discipline.

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Endnote

1. The articles by Shoop (1952) and Gilbert (1954) mistakenly indicate that the Navajo participated in the 1905 Tournament of Roses Parade. This is most likely due to a typographical error or a misinterpretation of Rust's handwritten notes on the subject. The Official Program of the 1903 Tournament of Roses (Anonymous 1903a) offers proof that the Navajo trip to Pasadena occurred in late December 1902 and the visitors participated in the parade on January 1, 1903. A circular (Anonymous 1903b) from the Pasadena Daily News also indicates the proper year of Tournament participation was 1903.

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Appendix 1

Papers Presented before the American Association for the Advancement of Science

August 1877, Nashville, Tennessee

Report on the Exploration of the Graves of the
Mound Builders in Scott and Mississippi Counties,
Missouri

August 1878, St. Louis, Missouri

A Find of Chipped-Stone Implements from the
Pacific Coast
Remarks on the Davenport Tablets

August 1882, Montreal, Canada

A Find of Chipped-Stone Implements from the Pa-
cific Coast and an Exhibition of the Specimens
The Davenport Tablets

August 1890, Indianapolis, Indiana

Obsidian Implements of California
The Basket-Mortar of Southern California
The Adze in California

August 1893, Madison, Wisconsin

Some Facts Concerning the Obsidian Blades called
Swords, from Northern California
Some Account of the Purification Ceremonies and
the Sacred Stone in Use Among the Mission
Indians of South California
The Indian Stone Adze of Northern California

August 1905, San Francisco, California

A Ceremony of the Mission Indians of Southern
California
The Obsidian Blades of Northern California
An Exhibition of Implements from San Nicolas
Island, Used for Cutting and Working Shell
Ornaments

Appendix 2

Publications by Horatio Nelson Rust

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|---|------|--|
| Rust, Horatio N. | 1898 | Correspondence. <i>The American Archaeologist</i> 2(3):75. |
| 1877 The Mound Builders in Missouri. <i>Western Review of Science and Industry</i> 1(9):531-536. | 1898 | Archaeological Frauds. <i>The American Archaeologist</i> 2(3):79. |
| 1881 The Davenport Tablets [abstracts]. <i>Proceedings of the American Association for the Advancement of Science</i> 31:584-585. | 1898 | Prehistoric Relics from San Nicolas Island, California. <i>The American Archaeologist</i> 2(4):100-101. |
| 1891 The Desert Sea. <i>The Californian</i> 1(1):94-103. | 1899 | On the Mojave Desert. <i>Land of Sunshine</i> 10(3):125-126. |
| 1893 Mission Indian Maturity Ceremonial. <i>American Anthropologist</i> 6(2):221-222. | 1899 | A Fiesta at Warners Ranch. <i>Land of Sunshine</i> 10(5):230-239. |
| 1896 The Moqui Snake Dance. <i>Land of Sunshine</i> 4(2):70-76. | 1901 | The Surprise Springs Meteorite. <i>Land of Sunshine</i> 14(1):11-14. |
| 1896 The Petrified Forest [of Arizona]. <i>Land of Sunshine</i> 4(3):123-125. | 1904 | Rogelio's Theological School. <i>Out West Magazine</i> 21(3):242-248. |
| 1897 A "Century Plant." <i>Land of Sunshine</i> 7(6):237-238. | 1905 | Obsidian Blades of California. <i>American Anthropologist</i> 7(4):688-689. |
| 1897 Correspondence. <i>The Antiquarian</i> 1(1):302. | 1906 | A Puberty Ceremony of the Mission Indians. <i>American Anthropologist</i> 8(1):28-32. |
| 1897 Survivals of the Stone Age: and Evolution of Certain Stone Implements. <i>The Antiquarian</i> 1(11):284-287. | 1906 | A Cache of Stone Bowls in California. <i>American Anthropologist</i> 8(4):686-687. |
| 1897 Tom, the Arrow-maker. <i>Land of Sunshine</i> 8(1):13-15. | 1907 | Anthropological Collections from San Miguel Island, California. <i>American Anthropologist</i> 9(3):656-657. |
| 1897 <i>Catalogue of Pre-Historic Relics from San Nicolas Island, California</i> . Published by the Author, Pasadena, California. | | |

APPENDIX 3

Locations of Collections Sold by Rust

Pratt Museum, Amherst College

Purchased by: Edward Hitchcock on behalf of Amherst College
 Purchase date: 1866
 Purchase price: approximately \$500
 Total number of specimens: not available
 Present Accession number(s): not available
 Description of collection: archaeological, geological, and natural history specimens
 Comments: Many of the Museum's records were destroyed in a fire in 1884, including information regarding the precise composition of this collection.

Peabody Museum, Yale University

Purchased by: O. C. Marsh, Henry Farnham, T. S. Woolsey, A. Van Name, and James E. English
 Purchase date: October 1876.
 Purchase price: \$2500
 Total number of specimens: approximately 900 artifacts
 Present Accession number(s): 906
 Description of collection: Ceramics from southeastern Missouri, particularly from the Sandy Woods Site, and some bone tools and lithic items
 Comments: Collection includes documentation regarding excavation work and locations of finds. Rust (Rust to Baird, 10/3/1872, Record Unit 52, Box 35, [SIA]) mentions selling Marsh a collection of artifacts in 1870 or 1871, and no other information regarding this collection has been identified at this time.

University Museum, University of Pennsylvania

Purchased by: Edward Drinker Cope
 Purchase date: 1890
 Purchase price: approximately \$4000
 Total number of specimens: at least 3000 artifacts
 Present Accession number(s): not available
 Description of collection: Mound Builder, Mexican, Plains, Midwestern, Northeastern, Southwestern, and some California and Southeastern artifacts
 Comments: This collection includes letters and notes containing data regarding the locations of some excavations and information on specific artifacts.

Logan Museum, Beloit College

Purchased by: Frank G. Logan
 Purchase date: 1891
 Purchase price: approximately \$15,000
 Total number of specimens: approximately 5000 artifacts
 Present Accession numbers: 1 and 2
 Description of collection: primarily archaeological material and some ethnographic items from California, the Midwest, Plains, Southwest, Mexico, Canada, New England, South Africa, New Zealand, Sweden, Denmark, and possibly Peru
 Comments: Accession # 1 contains the bulk of Rust's private collection. This collection includes letters and notes containing data regarding the location of some excavations and information on specific artifacts. Materials

from Sweden and Denmark were obtained by Rust in trade from Steenstrup.

Auckland Institute and Museum, Auckland, New Zealand

Purchased by: exchange from Rust to Thomas Frederick Cheeseman
 Purchase date: 1895
 Purchase price: acquired in trade
 Total number of specimens: approximately 24 artifacts
 Present Catalog numbers: 11915-11917, 12339-12340, 12362, 12364-12369, 12375-12376, 12484, 12958.1-6, 12960-12961
 Description of collection: California artifacts
 Comments: Specimens included groundstone, obsidian knives, and basketry.

Smithsonian Institution

Purchase date: 1900, 1901
 Purchase price: undetermined
 Total number of specimens: approximately 136 items, at least 73 baskets
 Present Accession number(s): 337098, 40049
 Present Catalog numbers: 207576-685, 219276-349
 Description of collection: California ethnographic and basketry specimens
 Comments: Rust was commissioned by the Smithsonian to make collections among the southern California Indians in 1900 and in 1901. Rust included information gathered from Native American informants on spinning and weaving techniques, customs and ceremonies, folklore, etc., photographs of baskets, and a map identifying locations of sites where Rust collected materials (Ms. # 7398, National Anthropological Archives, Washington D. C.).

Collections Donated by Rust

Field Museum of Natural History

1898/1899 Accession # 610

Approximately 19 stone implements, including manos, metates, hammerstones, and discoidal stones

Comments: Artifacts were excavated from a village site on a bluff west of the site of the Pasadena Hotel. Similar items from the site were sent by Rust to the Smithsonian and are listed under Accession # 34818, Catalog # 200269-294.

Logan Museum of Anthropology, Beloit College

ca.1897 Accession #2

Approximately 52 artifacts

Comments: Materials from the Grand Canyon region.

ca.1900s Accession #2

Natural history and geological specimens

Phoebe A. Hearst Museum of Anthropology (formerly the Lowie Museum of Anthropology), University of California, Berkeley

1905 Accession # 281

1 hammerstone

Comments: Item presented to Alfred Kroeber by Rust.

Royal Ontario Museum (formerly the Ontario Archaeological Museum), Toronto, Canada

1897 Unknown Accession #

Approximately 36 items, including lithic materials from California, Ohio, and Tennessee, clay artifacts from Mexico, and a model of a "Klamath Indian" canoe. Listed under collection numbers 1674-1675, 1679-1700, 2155, 5374, 9915, 12238-12246, 12258, and 12998

Peabody Museum, Harvard University

1877 Accession # 77-56

Human bone, shells and pottery fragments

1884 Accession # 84-62

Approximately 26 items probably from California, including a mortar, mortar basket top, pestle, acorns and meal, and dried cactus fruit

1903 Accession # 03-25

Siouan buckskin calendar collected in 1879

1905 Accession # 05-52

Worked shell from San Miguel Island

Comments: Accession # 77-56 is probably material from excavation in Nashville, Tennessee.

1899 Accession # 34818, Catalog # 200269-294

4 metates, 7 mealing stones, 6 hammer stones, 4 cores, 3 discoidal stones, 1 stone pendant, 1 stone ring from California

Smithsonian Institution

1877 Accession # 5975, Catalog # 27936-948

1 flint disc from Illinois, 6 pieces of pottery from Salt Springs, Illinois, 2 hematite axes, 2 pieces of "Cherokee pottery," 1 vase from Arizona, 1 clay pestle from Missouri, fragments of Illinois pottery

1878 Accession # 7072, Catalog # not available
copy of Colonial coin

1883 Accession # 13823, Catalog # 75953

1 basket mortar

1884 Accession # 14494, Catalog # 347-349

1 specimen of dried cactus fruit or fig, 1 specimen of oak acorns, 1 sample of meal from the acorn

1888 Accession # 21425, Catalog # 140010-025

Approximately 18 small stone implements from Pasadena, surface find

Comments: Regarding Accession # 21425, Rust made the following remark: "When Prof. Holmes was here he ... asked for a set for the National Museum ... because they represented a very complete outfit of a pre-historic village" (Rust 1899d).