Part 7 Engineer Cantonment and the Archeology of Exploration JOHN R. BOZELL AND ROBERT E. PEPPERL

ost will remember grade school American history classes featuring oversized maps with sweeping colored lines and arrows tracing the routes of Coronado, DeSoto, Lewis and Clark, Pike, and others. Those maps and the accounts of expeditions do not typically involve stationary places. By their very nature, "expeditions" do not stay in any one place for extended periods of time and do not leave an archeological record. In addition to Engineer Cantonment, attempts to discover sites associated with major expeditions have met with limited success and an even greater amount of frustration. Scholars have identified places that expeditions visited, such as Indian villages and major geologic landmarks, and have also noted forts and other facilities that developed as a result of expeditions. Success in identifying places directly and solely associated with expeditions has been far less common. Several attempts include:

- While several Native American villages visited by Hernando de Soto's 1539-1543 expeditions have been identified in the southeastern United States, actual features associated with de Soto have never been confirmed.¹
- Francisco Vázquez de Coronado's 1540-1542 journey from Mexico to central Kansas was the first major European incursion into the Central Plains. Several locations of mid-sixteenth century Spanish artifacts have been found in Texas and New Mexico, but features directly related to Coronado have remained elusive.²

- Between 1679 and his death in 1687, French explorer René-Robert Cavelier, Sieur de La Salle journeyed through the Mississippi River valley from the Gulf to present-day Minneapolis, the Illinois River valley, the Great Lakes region, and east Texas. In the process, LaSalle established a series of French forts. The precise locations of these or the earliest features are generally unknown with the notable exception of Fort St. Louis in southeastern Texas near Port Arthur.³
- Later French journeys by Etienne de Bourgmont in 1714 and Pierre and Paul Mallet in 1739-1741 traversed the Central Plains and other regions. Visits to native villages—such as Bourgmont's stop at the Oto village near Ashland, Nebraska and the Mallet Brothers wintering at Arkansas Post (actually a series of sites)—are documented, but specific archeological deposits associated with these journeys are not known.⁴
- Don Pedro de Villasur's 1720 journey into central Nebraska from the Southwest ended in disaster for the party when they were attacked by a combined force of Pawnee and Oto warriors in league with the French. Repeated efforts have been made to find the location of the Villasur camp and battle site with no real success. Similarly, while the Villasur party likely visited the Native American settlement at El Cuartelejo in western Kansas, direct archeological deposits associated with Villasur have not been found.⁵



- Zebulon Pike's journey across the Southern Plains and Front Range of the southern Rocky Mountains also is associated with specific known places such as Pike's Peak and the Kitkahaki Pawnee village in Webster County, Nebraska. The only places that are the result solely of Pike are a stockade he built in January-February of 1807 and two other temporary habitations in Colorado. The stockade in south-central Colorado has been reconstructed based on Pike's general description but the exact location has never been confirmed archeologically.⁶
- The Lewis and Clark Expedition spent the winter of 1805-06 at a "fort" built by the expedition members called Fort Clatsop at the mouth of the Columbia River in northwest Oregon. Although the location of the fort

and a description are well documented and a reconstruction has been made (with buildings that look remarkably similar to the Engineer Cantonment structure), repeated archeological projects have failed to identify archeological features associated with Lewis and Clark. Numerous pit features that have been suggested to represent privies or fireplaces associated with Lewis and Clark have recently been more clearly defined as natural features related to forest fires and tree removal.⁷

The above-noted research and other failed historic and archeological attempts to explore particular places associated with specific interior of North America expeditions, seem to suggest that Engineer Cantonment may be an entirely unique type of archeological resource. Not Reproduction of the Segesser hide painting of the 1720 Don Pedro de Villasur Expedition massacre by Pawnee and Oto warriors near Columbus, Nebraska. The much-faded original resides at the Palace of the Governors in Santa Fe, New Mexico. This replica was painted by Curt Peacock, NSHS only has it been definitively linked to the Long Expedition, but the site retains well-defined and archeologically informative features and material culture. The study of the archeological ruins of Engineer Cantonment has not only resulted in a clearer understanding of this singularly scientific expedition, but has also added to our overall view of early nineteenth century material culture, architecture, trade, and subsistence on the central Great Plains. Since the material culture reflects an extremely short span of time (nine months), it is of particular value in ongoing development of chronological, stylistic, and functional datasets for Euroamerian and post-contact Native American archeology on the Great Plains. The window glass chronology is a case in point.

The Long Expedition was the first governmentsponsored scientific expedition in America. It was specifically designed to gather information on the plants, animals, geography, and people of the interior of the continent. The journey was remarkable in the sense that it used trained scientists, naturalists, and artists to accomplish its goals. While scientific data were collected throughout the expedition, Engineer Cantonment is the only real base of operations where science was carried out and is available for archeological investigation. Certainly they spent a few days here and there at places like the Kansa and Pawnee villages, but there are no specific archeological materials or features associated with those visits.

The contribution of the Long Expedition to development of early American science is evident from the Engineer Cantonment stay. The expedition members have been acknowledged for their pioneering efforts in western transportation, as well as in art and pictorial representation of the expedition and the various cultural, biological, botanical, geological, and topographical observations made during the journey. In addition, a record of detailed ethnographic information for the previously undocumented Plains tribes was made possible by the extended stay at Engineer Cantonment. The archival information preserved from the Long Expedition—including illustrations, notes, and publications-can now be productively augmented by the systematic archeological information and collections generated from Engineer Cantonment. Taken together the information is a remarkable record of the history of science and exploration in America.

Finding Engineer Cantonment and the Value of Archival Information

The discovery of Engineer Cantonment is testimony to the use of archival documents in archeological inquiry. This is particularly true of the artwork. More than any other piece of information, the Peale illustrations of Engineer Cantonment led to the site's ultimate discovery and archeological exploration. Historians and archeologists pondered generalized descriptions of Engineer Cantonment's whereabouts for a full century, eventually narrowing down the location to several miles of Nebraska Missouri River bluff edge. However, it was the close and critical assessment of the topography that Peale depicted which ultimately bore fruit. It has become apparent that many of the dozens of Peale and Seymour illustrations made during the journey can be trusted in their accuracy. These artists were tasked with producing scientific illustrations, which they did profusely. The major topographic features in the Peale paintings include the meandering oxbow channel, two prominent bluff tops with sloping ridges to the north and south divided by a steeply incised ravine, and the subtle low rise upon which the Long Party built their cabins. Examination of the current landscape, and consideration of modern aerial photos and the subsurface archeological and geomorphic work, attest to the near-perfect accuracy of those 195-year-old illustrations. Similarly, the Seymour depiction of the Pawnee Council (looking northeast across the Missouri valley to the Iowa Loess Hills in the distance) is quite accurate, based on examination of modern topographic maps. The use of accurate historic illustrations in archeological and historical inquiry is certainly nothing new. Use of the wonderfully accurate work of Karl Bodmer during investigation of Lucien Fontenelle's Post and Fort Clark are obvious cases in point. Now we can comfortably add the efforts of Peale and Seymour to the list of archeologically important artistic assets.8

Peale and Seymour's accuracy and attention to detail is particularly important to those natural scientists studying their wonderful depictions of plants, insects, birds, and mammals. Other cultural features are depicted in the collections, such as Native Americans hunting, tipis, a Kansa village and lodge interior, and even the Oto village near Yutan seen incidentally in the far background of a painting of a pair of yellow-headed blackbirds. This remarkable view shows specific locations of burials and even what appear to be lodges under construction. This type of information is critical to understanding the content and character of this known archeological site. Aside from depictions of cultural features and animals, the character of the landscape and changes in the past two centuries are important to botanists, geomorphologists, and geologists. As but one example, the dramatic changes in tree cover and Missouri River channeling near Engineer Cantonment have major relevance to understanding the ever-changing process of landscape evolution.

The written documents embodied chiefly in the James accounts have proven to be highly accurate with regard to locating and investigating Engineer Cantonment. The narrative describes the cantonment as consisting of more than one building on a slight rise, and also accurately describes the harbor immediately to the east. Again, these consistencies with archeological information support confidence in many other aspects of the narrative, particularly with respect to ethnographic observations.

It is certain that the archeological site under investigation is, indeed, Engineer Cantonment. The site matches prior knowledge and descriptions of Engineer Cantonment nearly exactly in location, topographic setting, age and type of material culture, building size, and architectural style. The only two other contemporaneous Euroamerican sites in the same general vicinity are Manuel Lisa's Post (ca. 1812-1824) and Cantonment Barbour (1825-1826), neither of which has been discovered archeologically. Lisa's Post was variously reportedly as being between "0.5 and 1 mi" south of Engineer Cantonment. Cantonment Barbour is simply known to have been built nearby after both of these sites had been abandoned. Lisa's Post was described by expedition member Captain John Bell as "a large and extensive Indian trading establishment."9 Cantonment Barbour may have housed up to 200 soldiers and civilians in an estimated 20 or more buildings. In either case, the little terrace/fan landform upon which Engineer Cantonment is situated would have been far too small to accommodate the area needed for either of these two sites.

Future Research

The linear terrace topographic feature upon which the site rests, covers about 6,000 m2. This tract encompasses an area reasonably large enough to include two (or more) buildings, outside activity areas, and council areas. Including backhoe trenches and hand-excavated units, the archeological investigation opened about 200 m2 of the central portion of the site complex (about 4 percent of the site area) and the geophysical survey covered a 40 x 40 m block or 1,600 m2. Only about 40 percent of Structure 1 was excavated. While this sample has proven exceedingly productive in terms of addressing research themes, clearly there is much about this site that we do not know. At this juncture, there are no systematic plans for additional investigations. We are very grateful to the Gibreal family for donating the property and to the Nebraska State Historical Society Foundation for accepting it. This will allow the site to remain protected in perpetuity and available for research and interpretation.

There are several high priority research agendas which could fruitfully be explored. The most important would be to confirm the presence of the second structure. Evidence has shown that Structure 1 is likely the obscured rear building in the Peale illustrations, and that the front building is in a roadway and farmstead-disturbed area northeast of the Structure 1, although this remains to be confirmed. Based on the archeological work undertaken, additional testing northeast of Structure 1 would certainly result in a larger sample of artifacts and limestone. Careful plotting of material could result in confirmation of a building in this area. Additional efforts in Structure 1 would be productive from several perspectives, but more testing along wall lines to better define the basic architectural methods would be the highest Structure 1 priority.

The backhoe trenching revealed exterior hearth areas and a roasting pit, clearly indicating Long Party activities took place both indoors and outdoors. Additional exterior block excavations could increase understanding of the range of activities carried out at the site. Excavation units placed near the rear of Structure 1 suggested some type of blacksmithing activities and it would be useful to more clearly identify where and what this comprised. No latrine pits were discovered and they are typically rich in material culture. The most likely location for privies and other trash disposal features would be along the base of the bluff, an area that was only lightly explored through several test units.

Although it would be difficult, a close analysis of the topography in the Seymour Pawnee and Oto council paintings could produce a better target location for where these events took place. Similarly, some additional mechanical geomorphic coring could more definitively identify the harbor and shoreline in front of the cantonment. Finally, now that we have a firm location for Engineer Cantonment, The Yutan archeological site (25SD1) is a major Oto-Missouria village which is visible in the background of a Peale watercolor (shown in full on p. 60). This site has been investigated by NSHS archeologists. The left detail depicts village burials; the right detail shows the village itself, including earth lodges under construction. Courtesy of American Philosophical Society, Philadelphia (APSimg5673)







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Excavations in search of the second Engineer Cantonment structure. From left, Mindy Potmesil, Polly Wimberly, and Karen Steinauer. NSHS, State Archeology Office

Only a small portion of the Engineer Cantonment site has been excavated and numerous additional features and artifacts remain sealed below the surface. NSHS, State Archeology Office. Prepared by Don Cunningham the two other "missing" contemporaneous (and by all accounts, nearby) sites, Cantonment Barbour and Lisa's Post, may be somewhat easier to locate. Careful consideration of all archival sources and maps coupled with additional field explorations may yield productive results.

NOTES

¹ Kristin Ohlson, "Searching for De Soto," *American Archaeology* (Fall 2014).

² Donald J. Blakeslee and Jay C. Blaine, "The Jimmy Owens Site: New Perspectives on the Coronado Expedition," in *The Coronado Expedition from the Distance of 460 Years*, Richard Flint and Shirley Cushing Flint, eds. (Albuquerque: University of New Mexico Press, 2003); Clay Mathers, Charles Haecker, James W. Kendrick, and Steve Baumann, "Before the Signatures: A New Vazquez de Coronado Site at the El Morro National Monument, West-Central New Mexico," *CRM: The Journal of Heritage Stewardship* 7, no.1 (2010); and Bradley J. Vierra and Stanley M. Hordes, "Let the Dust Settle: A Review of the Coronado Campsite in the Tiguex Province," in *The Coronado Expedition to Tierra Nueva: The 1540-1542 Route Across the Southwest*, Richard Flint and Shirley Cushing Flint, eds. (Niowt, CO: The University Press of Colorado, 1997), 249-61.

³ Texas Historical Commission, *The LaSalle Project*. Electronic document, http://www.thc.texas.gov/preserve/ archeology/la-salle-archeology-projects, accessed Jan 19, 2015.

⁴ Donald J. Blakeslee, *Along Ancient Trails: The Mallet Expedition of 1739-1740* (Niwot, Colorado: University Press of Colorado, 1995); Roger E. Coleman, "The Arkansas Post Story: Arkansas Post National Monument," *Southwest Cultural Resources Center Professional Papers* No. 12 (Santa Fe, NM: National Park Service, 1987).

⁵ Benjamin J. Bilgri, "Ambushed at Dawn: An Archeological Analysis of the Catastrophic Defeat of the 1720 Villasur Expedition," Master's thesis, Department of Anthropology (Lincoln: University of Nebraska, 2012); Christopher Steinke, "Leading the 'Father': The Pawnee Homeland, Coureurs de Bois, and the Villasur Expedition of 1720," *Great Plains Quarterly* 32 no. 1 (2012): 43-62.

⁶ Joseph S. Mendinghall, "*Pike's Stockade*," *National Register of Historic Places Inventory-Nomination Form.* (ms on file, Keeper of the National Register, Washington D.C.: National Park Service, 1975).

⁷ Julie K. Stein, Roger Kiers, Jennie Deo, Kate Gallagher, Chris Lockwood, and Scotty Moore, *A Geoarcheological Analysis of Fort Clatsop, Lewis and Clark National Historical Park*. Report submitted to Lewis and Clark National Historical Park (Seattle: University of Washington, Department of Anthropology, 2006).

⁸ Richard E. Jensen, "The Fontenelle and Cabanné Posts: The History and Archeology of Two Missouri River Sites, 1822-1838," *Publications in Anthropology* No. 11 (Lincoln: Nebraska State Historical Society, 1998); W. Raymond Wood and Robert M. Lindholm, 2013 *Karl Bodmer's America Revisited, Landscape Views Across Time* (Norman: University of Oklahoma Press, 2013); and W. Raymond Wood, William J. Hunt, and Randy H. Williams, *Fort Clark* and Its Indian Neighbors: A Trading Post on the Upper Missouri (Norman: University of Oklahoma Press, 2011).

⁹ John R. Bell, "The Journal of Captain John R. Bell, Official Journalist for the Stephen H. Long Expedition to the Rocky Mountains, 1820," *The Far West and the Rockies Historical Series 1820-1875*, Vol. 6, Harlin M. Fuller and LeRoy R Hafen, eds. (Glendale, CA: Arthur H. Clark, 1957), 86.

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