MORE THAN JUST BURIAL MOUNDS: WEST VIRGINIA ARCHAEOLOGY’S FIRST CHAPTER

by Stanley W. Baker
109 S. Galena Rd.
Sunbury, Ohio

Shorter length articles regarding the history of West Virginia archaeology have been written in the past (see for example McMichael 1963 or Broyles 2002). However, a comprehensive history of West Virginia archaeology has yet to be written, but one should be. Such a detailed overview would require the researcher to divide the topic into several thematic eras with individual chapters focusing on information about the community of researchers involved in each of these distinctive periods. Successive eras would roughly include: 1) an early period of intellectual curiosity stemming from the Age of Enlightenment; 2) institutional curiosity as represented by the mounting of expeditions from outside the state; 3) academic curiosity stemming from the growth of modern anthropology; 4) local amateur interests marked by the founding of the West Virginia Archeological Society and the establishment of the Office of State Archaeologist at the West Virginia Geological and Economic Survey; and 5) modern research dominated by Cultural Resource Management (CRM) stemming from Federal compliance. Drawing any conclusions from the latter era would seem somewhat premature for obvious reasons since this work is still ongoing.

Prior to the current era now dominated by CRM, the West Virginia Geological and Economic Survey, Morgantown, Virginia, supported the office of State Archaeologist from 1960 to 1984. The office was just an idea developed from leaders in the amateur community during the 1950s. This idea ultimately led to Dr. Edward McMichael coming to the state in 1960 where he developed a long running program at the Geological Survey. Literally from scratch, Dr. McMichael developed a research-focused operation and began to assemble the first major state-owned collection of prehistoric artifacts. Much of the archaeological material in the state collections was based on the identification of important archaeological sites that were in need of in-depth study (McMichael 1963: 164-166). Summer field investigations were normal for nearly a decade and a half.

Funding of a state archaeologist also allowed for the development of a state-wide site inventory. McMichael organized the already available data based on two decades of work and interest shown by an amateur community, the same community which founded the West Virginia Archeological Society. Unfortunately, the West Virginia Geological and Economic Survey’s Office of State Archaeologist was closed when Hunter Lesser left the organization in 1983. Within months after his departure and then for several years, the state collections, the associated research materials, and the state-wide archaeological inventory files were moved, maintained, and expanded upon by the Blennerhassett Historic Park Commission in Parkersburg, West Virginia. These events and activities were apparently unknown to Bettye Broyles (2002: 125) when she prepared her recent history. Today, the state collections are maintained in Moundsville, West Virginia and the archaeological inventory can be found in Charleston, West Virginia.

As previously mentioned, just prior to the activities of the West Virginia Geological and Economic Survey, the preceding decade was marked by the activities of the West Virginia Archeological Society from its inception in 1949. This is another story worthy of deeper research. It should be noted this amateur organization played a fundamental role in attracting and supporting outside academic interests, like those of the Carnegie Museum, Pittsburgh, Pennsylvania, with researchers willing to come downriver and conduct scientific research here.

Obviously, the history of West Virginia archaeology did not start with the founding of the West Virginia Archeological Society, but from research conducted during a long and much earlier period. It is widely known that archaeologists had been coming to West Virginia for one hundred years prior to the creation of the office of state archaeology and the founding of the West Virginia Archeological Society. In fact, these institutional investigations and academic studies have been briefly summarized by Broyles (2002: 115-115). Major institutions, like the Smithsonian, the Bureau of Ethnology, and the American Ethnological Society, viewed West Virginia as ripe in archaeological resources and several expeditions to western Virginia, later West Virginia, were mounted during the mid- to late 19th century. In summary, the mounted expeditions generally focused on the occurrence of burial mounds found along the state’s many river valleys. The literature of the era is dominated by summaries of mound surveys and mound excavations conducted across West Virginia.

One of the first and possibly the most widely known pieces of research addressing West Virginia, then Virginia, was prepared by Ephraim G. Squier and Edwin H. Davis (1848) and published as the first Smithsonianian Contribution to Knowledge. Institutions, like the Smithsonian, were drawn to West Virginia by stories of great mounds and wonderful discoveries within these prehistoric structures. The Squier and Davis team can be said to have set the tone for the several expeditionary groups which came to the Upper Ohio Valley during the subsequent decades of the 19th century.

While modern researchers have taken the expeditionary work quite seriously, evidence gathered during the earliest era, or information collected before 1850 by the intellectually curious, has not been generally sought and has been typically treated as merely anecdotal in nature. The one exception is the 1838 excavation at Grave Creek Mound. In 1998, the West Virginia Division of Culture and History’s State Historic Preservation Office celebrated 160 years of archaeology in West Virginia. To commemorate the event, a poster was prepared in October for Archaeology Month which cited Abelard Tomlinson’s excavations of Grave Creek Mound as the seminal event in this history. This citation is not a novel idea but appears to be a commonly held belief in both the amateur and professional community (see for example McMichael 1963: 159 or Broyles 2002: 115). Its acceptance is based mainly on 19th century promotion and not necessarily the recovery of vast amounts of scientific data.

Abelard Tomlinson was the grandson of Joseph Tomlinson, the first landowner in and around Moundsville, West Virginia. The Tomlinson family felt the mound might be a financially rewarding attraction. Abelard Tomlinson reportedly began by excavating horizontal and vertical tunnels through the mound on March 19, 1838. The event and its results were reported by Thomas Townsend, a surgeon and natural scientist living in Wheeling, Virginia. Townsend’s article was later published downriver in a newspaper called the Cincinnati Chronicle. The information relating to Grave Creek Mound has been retold many times (see for example Delf Norona 1962). The continued wonderment caused the West Virginia Geological and Economic Survey to conduct testing around and coring within the Grave Creek Mound structure (Hemms 1984). The work was designed to reinterpret the mound’s internal stratigraphy and its date of construction.

The original 1838 excavations also resulted in the immediate opening of a local museum. Tours were given through the mound’s interior. These opportunities for study were suspended as a result of financial failure of the museum and later the collapse of the lower tunnel in 1847. Just prior to this terminal event, Henry Schoolcraft (1844) visited the mound and partially documented the Tomlinson collection. Schoolcraft also recorded the position of other smaller mounds across the bottomland where Moundsville, West Virginia is today.
However, the scientific value of these excavations have been somewhat marred by the loss of many of the archaeological specimens recovered and the reported finding of an engraved stone tablet of questionable origins. The 1838 events within Grave Creek Mound have recently been interpreted as much more than a theatrical event furthered by the second is not so easily answered. Apparently James McBride and two colleagues, J. W. Erwin and Robert C. Shute were contracted in 1838 to survey the Marietta and Wheelersburg Turnpike road along the west bank of the Ohio River (Norona 1984: xvii-xviii). Ultimately, the work would bequeathed to the Academy of Natural Sciences, Philadelphia, Pennsylvania. The journals are now on permanent loan to the Ohio Historical Society. The proximity of this literary trove provide a unique opportunity to learn more about early 19th century Ohio Valley archaeology beyond the bounds of Alexandria Works.

Intellectual curiosity led me through the entire collection of hand-drawn figures and plat maps painstakingly rendered over one hundred and fifty years ago. The research gravitated to one of the drawings (Figure 2) in particular, a petroglyph reportedly observed by McBride in "Virginia [and] four miles above Steubenville...July 4, 1838." Obviously Steubenville is a reference to an Ohio city. The site of the petroglyph would have been on the bank of the Ohio River between modern Weirton, West Virginia and Brown's Island on the river. The drawing was later copied (Figure 3) and published by Squier and Davis (1948: 298). However, the origin of this drawing and year of discovery are not cited in Ancient Monuments of the Mississippi Valley. Later, James Murphy (1978) documented this omission and published a Xerox copy of J. W. Erwin's rough sketch. These dis-coveries, if you will, led Murphy to ask: who was James McBride so far from southwestern Ohio and should his observations be considered a unique site unrelated to the better known Brown's Island petroglyph site? The first can be answered easily; the second is not so easily answered.

Exactly 120 years from the date of McBride's earlier survey, the Carnegie Museum, Pittsburgh, Pennsylvania made the identification and documentation of petroglyph sites in the Upper Ohio Valley region a long-term research goal (Swauger 1984: xvi-xviii). Ultimately, the work would carry research director James Swauger into portions of five states associated with the Ohio drainage. Swauger continued his research at the Carnegie for 44 years and pursued his interest in petroglyphs until his death at age 92 on December 18, 2005.

A Review of Early Petroglyph Data from around Browns’ Island, Hancock County, West Virginia.

The following history of West Virginia archaeological research and associated petroglyph data has little to do with my own field efforts. However, I did find myself in a series of fortuitous situations that enabled me to identify several rare and unpublished archaeological citations related to West Virginia. These circumstances allow me to share some misplaced evidence seldom remembered in today's archaeological literature. The petroglyph evidence may or may not have been formally recorded depending on how one accepts and interprets the following locational information. Other evidence appears to be totally new to the modern archaeological literature.

About three or four years ago, I was researching the Alexandria Earthwork Site (35MY19) located along the Great Miami River, Ohio. I had excavated six miles south of downtown Dayton, Ohio. Ephraime George Squier and Erwin Hamilton Davis reported the site and provided a plan view or plate attributing the original survey to James McBride of Hamilton, Ohio, whose work was said to "...rank second to none in interest and value (Squier and Davis 1848: xxxi)." Ancient Monuments... reports that James McBride was assisted in his endeavors by John W. Erwin of Hamilton, Ohio, resident engineer on the Miami and Erie Canal.

James McBride (1788-1859) is fairly well known in Ohio's archaeological circles for these contributions and as an early advocate of the science (Figure 1). McBride held diverse interest from merchandising, surveying, and local politics. He was an historian, archaeologist, ethnohistorian, and in 1831 he became a founding member of the Historical and Philosophical Society of Ohio. McBride Hall on the campus of Miami University in Oxford, Ohio is a testament to a man who served the university for 49 years. Recently, James McBride was described as "...one of a group of often talented and always-zealous amateurs...[who] conducted investigations at their own expense, during leisure hours, driven only by intellectual curiosity (Barnhart 1998: 8)." Squier and Davis's (1848) monumental work on western antiquities was greatly enhanced by the diligent surveys of McBride and his friend, J. W. Erwin, who were in the process of conducting field survey of all the mound sites found along the Great Miami River.

I pursued the McBride legacy and quickly learned his four manuscript journals can be found in Columbus, Ohio. William Vaux acquired McBride's library and collections at public auction held in 1859 and soon after McBride's death. The collection was later bequeathed to the Academy of Natural Sciences, Philadelphia, Pennsylvania. The journals are now on permanent loan to the Ohio Historical Society. The proximity of this literary trove provide a unique opportunity to learn more about early 19th century Ohio Valley archaeology beyond the bounds of Alexandria Works.

Intellectual curiosity led me through the entire collection of hand-drawn figures and plat maps painstakingly rendered over one hundred and fifty years ago. The research gravitated to one of the drawings (Figure 2) in particular, a petroglyph reportedly observed by McBride in "Virginia [and] four miles above Steubenville...July 4, 1838." Obviously Steubenville is a reference to an Ohio city. The site of the petroglyph would have been on the bank of the Ohio River between modern Weirton, West Virginia and Brown's Island on the river. The drawing was later copied (Figure 3) and published by Squier and Davis (1948: 298). However, the origin of this drawing and year of discovery are not cited in Ancient Monuments of the Mississippi Valley. Later, James Murphy (1978) documented this omission and published a Xerox copy of J. W. Erwin's rough sketch. These dis-coveries, if you will, led Murphy to ask: who was James McBride so far from southwestern Ohio and should his observations be considered a unique site unrelated to the better known Brown's Island petroglyph site? The first can be answered easily; the second is not so easily answered.

Apparently James McBride and two colleagues, J. W. Erwin and Robert C. Shute were contracted in 1838 to survey the Marietta and Wheelersburg Turnpike road along the west bank of the Ohio River (Norona 1984: xvii-xviii). The McBride manuscript states the survey encamped on the Ephraim cable farm on July 3rd and the team crossed the river the next morning. Coincidentally, their visit to Moundsville occurred at the completion of the March 18th to mid-June, 1838 excavations of the mound by Abelard Tomlinson and Thomas Biggs (see Norona 1962). Though unproved, James McBride may have become acquainted with Thomas Townsend of Wheeling, Virginia during the turnpike survey. If true, James McBride may have been instrumental in having the Grave Creek Mound article published in the Cincinnati Gazette but it has not been proved.

Though excavations at Grave Creek are well known, McBride's petroglyph site seems less so. Regardless, the latter site seems virtually unknown to even the most zealous modern researcher like James Swauger (1974) who painstakingly investigated petroglyphs throughout the Upper Ohio Valley region. Both Delf Norona (1952), an amateur who was obviously aware of petroglyphs, and Edward McMichael (1963), who became the first modern professional archaeologist in West Virginia, are equally quiet on petroglyphs along the upper Ohio River. It wasn't until an article on "Half Moon Site" petroglyph was published that the connection between the James McBride's journal sketch (Figure 2) and Squier and Davis figure (Figure 3) was made (Murphy 1978: 50).
James Swauger’s interest in carvings along the Ohio River mainstem is without question. However, the creation of the modern navigation channel by the U. S. Army Corps of Engineers designed to allow year-round navigation effectively raised the pool of the river a number of feet, flooding natural rock outcrops on which many carvings were once observed. To compensate for this impediment, Swauger was forced to rely on earlier field studies. In 1963, James Swauger’s research carried him to East Liverpool, Ohio, in order to study the Harold B. Barth collection of photographs, notes, and tracings of nearby petroglyph sites (Swauger 1963 or 1969: 5).

The Barth collection was found to contain evidence collected in 1908 and 1909 of carvings once located between Brown’s Island and Weirton, West Virginia. James Swauger (1969: 5 and 1974: 79) contends the Weirton Petroglyphs (a common name) is synonymous with his Brown Island Petroglyph site (46HK8). Estimated latitude and longitude data provided by Swauger place the site in the eastern channel of the Ohio River about half way downstream from the head of the island. Later, his plat map of the site exhibits a location at the head of the island (Swauger 1974: Plate 82). Obviously, the author was unable to personally visit and precisely define the location given the current condition of the river channel.

One may conclude that the location for the reported petroglyph at the head of Brown’s Island is unlikely. Even by Harold Barth’s time, or the early 20th century, the areas around the head of the island were physically scarred by construction of a diversionary dam and dredging along the navigation channel. These man-made features appear on early 20th century navigation charts. More likely, the carvings may have been found on the east or south east side of the island, possibly where the Corps of Engineers’ early 20th century navigation charts mention rock exposures found further downstream (i.e. River Mile 61.75, 62.2, 62.9, and/or 63.75). Later in his Brown’s Island article, Swauger (1969:19) states he found no literature reference to the Brown’s Island petroglyph. This conclusion is somewhat surprising given the history of early archaeological efforts along this portion of the Ohio River.

Conversely, James McBride’s data is clearly the earliest reference to a petroglyph site in the Weirton, West Virginia area. Although few have had the opportunity to open the manuscript source, the Weirton petroglyph data was formally published by Squier and Davis (1848: 298) in the first volume of Smithsonian Contributions. James Swauger’s omission is a clear oversight but is understandable for two very good reasons. The published reference text (Squier and Davis 1848: fig. 207) is clearly nestled within the description of “Sculptures or Inscribed Rocks” (ibid. 293-298), or summary of the Guyandotte Petroglyphs, Cabell County, West Virginia and the landscape figure for the Guyandotte region (ibid. 299).

Secondly, Squier and Davis’s writing generally focuses on areas found well outside the original region studied by James Swauger during the 1950s and 1960s. Obviously, all of Swauger’s contemporary reviews also missed the citation. Disregarding James Swauger’s comment further, one must ask whether any other contemporary descriptions provide a more precise location of the Brown’s Island petroglyph site. If one delves further into the history of Brown’s Island other pertinent information can be found.

Though the James McBride citation is quite early for a petroglyph site, the 1838 visit is not the first reference to rock carvings in or near Weirton West Virginia, or more properly Holliday’s Cove area as it was known before 1950. In fact, Benjamin Smith Barton from eastern Pennsylvania actually penned the earliest known reference to carvings along this portion of the Ohio River mainstem that I have found. Barton’s (1799: 195) description is included herein due to its rarity but also because of its relevant implications to West Virginia archaeology and the Brown’s Island site. The Barton article states:

In the western part of Virginia, I have examined a large stratum of rock, which is engraved with hundreds of hieroglyphick [sic]. They are, doubtless, very ancient...These inscriptions are engraved on a large stratum of rocks, on the south-east side of the Ohio River, about two miles [modern River Mile 62.2] below the mouth of Indian or King’s Creek [modern River Mile 60.2], which empties itself into the Ohio [River] about fifty miles below Fort-Pitt. The greater part of the rocks lies nearly horizontal, and so near the edge of the river, that at times the water entirely covers them. At the distance of a few yards, however, from the bank of the river, there are several large masses of the same species of rock on which also I observed inscriptions: these, it is probable, have been formerly attached to the horizontal stratum, and have either been removed by the hand of man, or by some violent inundation of the river. It is, at least, certain, that the inscriptions upon both are of the same kind, and there can be little doubt that they have both been engraved at the same time.

The horizontal stratum of rocks extends, for a considerable distance along the border of the Ohio: but I cannot, with certainty, affirm how large a portion of it is engraved with the inscriptions, or marks.

The 1799 publication date would place his visit to the Holliday’s Cove region at least 40 years, if not 50 years prior to the inconsistently cited but slightly better known 1838 McBride site visit.

Benjamin Smith Barton (1766-1815) was born in Lancaster County, Pennsylvania and lived most his life in eastern Pennsylvania (Figure 4). He was a very well known figure in 18th century scientific circles. Barton is most well known as an eminent botanist and later in life he was an advisor to the Lewis and Clark Louisiana Purchase expedition crossing the American west to the Pacific Ocean. Barton was also a renowned member of the American Philosophical Society and taught at the University of Pennsylvania. In addition to his interests in natural history, he wrote extensively on the Native American Indians with an interest in their origins and their antiquity in the Americas. This later fascination probably stemmed from his father’s earlier interests. Barton’s father, Thomas Barton (1730-1780), was an Anglican minister, educator, mineralogist, and an early member of the American Philosophical Society (Russell 1979: 321). His ministry included work at the Conestoga Indian Reservation, Lancaster County, Pennsylvania. Thomas Barton is also known to have prepared a pamphlet related to the Paxton Boys’ attack on the Indian reserve and the 1764 massacre of the last native inhabitants found there.

Though sometime before 1796, the precise year Benjamin Barton recorded antiquities along the course of the Ohio River was not cited. However, one can estimate the visit may have been in conjunction with the survey to locate the dividing line between Pennsylvania and Virginia. This survey was conducted by Benjamin’s uncle, David Rittenhouse (1732-1796) of Philadelphia, Pennsylvania and other surveyors including Major Andrew Elicott and Thomas Hutchins. Rittenhouse (Figure 5) was a noted surveyor, “mechanic” or manufacturer of surveying instruments, and astronomer. He was also a principal member of the American Philosophical Society. The eastern boundary of Pennsylvania between the Mason Dixon Line (south) and the Ohio River (north) is known to have been conducted in 1785.

The previous year (1784) David Rittenhouse and Andrew Elicott assembled two survey crews, whose first objective was locating the southwestern corner of Pennsylvania. This was an imaginary point founded by law and described as a fixed latitude and longitude before this date. To find the exact corner on the ground, they repeatedly took astronomical observations and compared the resultant celestial bearings which were mathematically compared to similar sightings on the Delaware River at the eastern end of the same line. When the demarcation was complete, at the beginning of June 1785, Rittenhouse crew returned to southwestern Pennsylvania delineating the longitude line northward to where it crossed the Ohio River. This line then marked the north to south boundary between the newly formed states of Virginia and Pennsylvania.

Rittenhouse continued to take celestial bearings on the North Star almost nightly to correct for declination during the northward march. The work was not completed until August 20th of that year. Though not proven...
in contemporary writings, Benjamin Barton likely accompanied the expedition at which time he must have recorded the petroglyph sighting. Hypothetically, the methodical nature of the survey would have left much time for the younger Benjamin Barton to pursue his other scientific interests.

Benton’s involvement with the boundary survey is at least indirectly confirmed by Barton’s later activities which would have disqualified any opportunity for field research after about 1785. In fact, Barton only had a narrow window of time to have traveled west, a period which precisely coincides with the Rittenhouse expedition. Barton’s excursion could not have been accomplished later than 1787 since in that year, when he turned 21, he relocated to Edinburgh, Scotland to begin his university studies. These continued through 1789. Later, in the 1790s, he stated he did not have the time to pursue certain research tracks until the end of the century (Barton 1799: xxiii and xxiv).

A testable assumption was made that the site described by Benjamin Barton in the 1790s, then by Harold Barth at the beginning of the 20th century, and recently by James Swauger in the 1970s is one and the same. An understanding where the Brown’s Island Petroglyph Site can be found is an equally important question to answer. These preliminary assertions are partially affirmed by historic data recently uncovered. Though technically not in West Virginia, the History of Jefferson County, Ohio provides the data to confirm this association. Doyle’s (1910: 36) description provides both photographic documentation and also a rather precise location for the Brown’s Island petroglyph site. Doyle (1910: 36-37) goes on to state the petroglyph is located “…on the West Virginia side of the river, opposite Brown’s Island, six miles above Steubenville… the figures are located at the upper entrance of Holliday’s Cove, already referred to in connection with river terraces…”.

Downtown Steubenville is located at River Mile 68 which would place the carvings at River Mile 62 or at mid-island precisely at the mouth of the cove. Additionally, Doyle’s photograph proves we are dealing with the same petroglyph site since it shows Swauger’s (1974: Plates 85 and 89) “Designs 15 and 16” or the interlocking sandhill cranes, and the dog-like animal figure with x-ray elements designated “Design 24”. Importantly, the Doyle photograph further confirms the designs are found on a horizontal outcrop of sandstone on the floor of the river which is also described by Benjamin Barton so many years earlier.

Benjamin Barton was closely linked to the American Philosophical Society. Today, the Society maintains a sizable collection of Benjamin Barton Papers in their manuscript collection. A general review of these holdings found a reference to “Indian Hieroglyphs” included in the graphic material which had been amassed by Barton. The graphic is composed of one sheet divided into four number cells with eight “Hieroglyphs” rendered on the sheet (Figure 6). One can reasonably conclude these drawings represent eight of the petroglyph figures observed on the Ohio River in 1785 since Barton’s (1799) published description similarly classifies the inscriptions as “hieroglyphick[s]”.

Swauger (1989) reproduces 47 different designs from the Brown’s Island Petroglyph Site. These figures were compared to the eight figures rendered by Barton. Six of Swauger’s figures (Figure 7) definitely appear in the Barton drawings (Design 38 or Figure 5a, Design 32 or Figure 4e, Design 7 or Figure 2f, Design 14 or Figure 3a, Design 23 or Figure 3f, and Design 25 or Figure 3h). The other two Barton figures are very similar to Design 8 or Figure 2g and Design 26 or Figure 3f found in Swauger’s article. Upon further comparison, five of the Barton figures are shown in reverse when compared with Swauger figures (Figures 8, 23, 25, 26, and 32). Since Barton’s renderings were drawn from life, it is unlikely the images were reversed in the manuscript sketch. This data indicates Swauger’s copy negatives or photographic slides were flipped during the printing process. Future study should reconsider this evidence and correct the designs accordingly. Unquestionably however, one may conclude that both Benjamin Barton and James Swauger were dealing with one and the same petroglyph site.

Previously, James Swauger (1968: 5) hints there may be two sites but later concludes the “Weirton Site” and the “Brown’s Island Site” are the same. Conversely, there could actually be two distinct site locations, i.e. one understood by some researchers including Benjamin Barton, Harold Barth, Joseph Doyle and James Swauger on one hand; versus a second traditional site based on research by James McBride in 1838 and the Squier and Davis team (1848), then repeated by Delf Norona (1952)? In fact, the strong physical dichotomy between the two sites can be drawn equivocally based on these two separate lines of evidence.

Swauger’s (1974: 79-80) summary of the 47 Barth designs includes 14 birds, 11 mammals, eight geometric designs, three human-like, five mythological creatures, three turtles, and one plant, possibly a corn stalk at Brown’s Island. Contrastingly, the Squier and Davis (1848: 298, Figure 206) drawing includes a geometrically segmented circle, one to five smaller bear paws, two to six bird tracks, about six human-like characters, a winged bird (?), and two creatures best described as mythological with horns or multiple legs. Both Barth and McBride include turtle designs but the two renditions appear dissimilarly suggesting they are not the same images. Based on this artistic and stylistic evidence, one may easily conclude the two sites appear unique and may represent two neighboring but separate locations with the James McBride recording representing one site, while Benjamin Barton and Harold Barth primary data representing another site.

Though four miles north of Steubenville, Ohio in James McBride’s notes sounds like an estimated or rounded number, I have always found it surprising how accurately these estimates are when described by people associated with surveying. Both Benjamin Barton and James McBride were surveyors so it hardly seems likely either of them would have been aware of carvings downstream but he apparently did not stop to better record them, or at least to develop a deeper recollection of the events which took place around 1785.

My only reservation in recording a second site is the question whether James McBride was describing river miles or roadway miles. Following roadways north would eliminate a one mile meander of the Ohio River. This would place the James McBride sighting at least one mile below the Brown’s Island site (46HK8) if not a full two miles downstream. In conclusion, Murphy (1978: 51) rightfully concludes James McBride’s petroglyph can be roughly located since it was said to be located opposite the Cable family residence in Jefferson County, Ohio and about a mile below Brown’s Island. The primary citations easily represent evidence of two petroglyph localities, one at the mid-point and a second well below Brown’s Island. There is no real evidence that the McBride site and Barton Barth site are synonymous. However, there is another historic reference which may suggest a third petroglyph site exist at Brown’s Island but ignored in modern research.

The third Brown’s Island site location is based on comments in a brief article penned by Charles Whittlesey (1880: 54-55). However, the citation appears to be generally unknown in modern petroglyph literature. Whittlesey’s research contends that certain petroglyphs are stylistically analogous with the pictographic arts of recent natives. This is not necessarily a novel concept. To prove his point, the citation goes on to recount Jacob Myers’ earlier recollection of a 1774 border warfare incident which tends to support Charles Whittlesey’s original theory that certain figures may have indeed been carved in the 18th century. Myers, an early settler, scout, and hunter, permanently settled below Yellow Creek and continued to live there well into the latter half of the 19th century. Jacob Myers’ recollection was later published in a local newspaper. James Whittlesey was familiar with the story and retells us that while scouting on the Virginia shore opposite Brown’s Island Myers happened to see:

...an Indian at work on the fiat rocks. He [Myers] shot the Indian, and, getting to the island on a raft, he saw effigies of animals, among which was that of a deer, which the Indian had partly executed. It is not explained with what
tool this work was being done. It is only at very low water that this group can be seen (Whittlesey 1880: 55).

Though not commonly reported, the area surrounding Brown's Island must have been well known for such rock carving due to the commonness of travel up and down the river.

The circa 1785 Benjamin Barton petroglyph report can be considered one of the earliest attempts at identifying archaeological sites in the upper Ohio Valley and possibly the first attempt to conduct archaeological investigations within the modern bounds of West Virginia. Only a few earlier aboriginal site references exist. Possi-

bly the earliest known is a reported petro-
glyph mentioned by Gaspard Chaussegros de Lery, a French military engineer traveling through the Ohio country as far as Detroit in 1754 and on to Fort Duquesne the following year (see Hanna 1911 (2): 167-168 and 179-180). However, the citation would imply he first viewed the rock carvings found near the mouth of Little Beaver Creek in 1739 while traveling with a French envoy to the Chicka-

saw under the command of Chevalier de Longueuil. On the third of April 1755 de Lery writes;

...we crossed a River which is a branch of the Kenle Raiaiton [Little Beaver Creek]. This is the same which in 1739, I called Riviere au Portrait, because, at the spot where it enters the Belle Riv-

iere, there are many marks and figures of men and animals cut out on the rocks, as if with chisels.

The next French expedition down the Ohio River for which a record exists is the 1749 Pierre Joseph de Colton journey to reclaim the Ohio River Valley and other points westward. Traveling with the expedi-
tion was Father Joseph Bonneccamps who prepared a journal and an accompanying map of the river. Bonneccamps reports the French party stopped at a sacred rock exposure along the upper Allegheny River. Here, the party witnessed numerous carved figures. This spot is now known as “Indian God Rock Petroglyphs — 36VE26” which was later studied and recorded by Swauger (1974: 72-76). However, it should also be pointed out that at least one other mid-18th century petroglyph citation is known to this author.

A contemporaneous English map of the Ohio River Valley, namely the 1755 Lewis Evan “...Map of the Middle British Colo-

nies...”, includes a reference to “Antique Sculptures” near “Weeling” (Figure 8). Their position generally corresponds with the modern Wheeling Creek and an Ohio River island of the same name. Many research-

ers seem to feel Evan's map provides quite accurate locational information. For this reason, the sculpture label located near “Weeling” is thought to be strong enough evidence to record the location as a petro-
glyph of Native American origin and desig-
nate it as 33BL3 in a major published study (Swauger 1984: 30-31). James Swauger was not the first to accept the notion that this reference points to a legitimate archae-

ological site. However, there appears to be no collaborative evidence supporting James Swauger's conclusion.

In my estimation, Lewis Evan's efforts produced an interesting but rather primitive map. The Evan's map was compiled from various sources and was not necessarily based on an actual field survey. For these reasons, the course of the Ohio River is rather stylized. It can also be demonstrated that certain landmarks along the river are poorly located. In Figure 8, the position of Le Tart Falls is inaccurately located at a point just upstream from the Great Bend, not downstream as found in real life. At best, it should be considered a best approximation based on the published data, unpublished notes, and gathered remarks solicited from his traveling contemporaries.

Alternatively, Evan's “Antique Sculptures” notation on his published map may be a simple mis-location error, or the result of someone's faulty memory. It should also be pointed out, that Wheeling Island and Brown's Island are just 29 miles apart or are found on a stretch of river that can be navi-
gated in less than one day. Though incon-
sistently described, the carvings at Brown's Island were likely to be encountered by vari-
ous 18th century river travelers. The map maker may have had a somewhat confused understanding of the islands along the Ohio River area has simply mislocated the “Antique Sculptures” at the wrong island. Furthermore, no tangible evidence for a Belmont County petroglyph on the Ohio River has come to light in the last 200 years though the Wheeling area sets astride one of the greatest transportation cross-roads of the entire modern era. If a petroglyph was located here, surely another visitor would have mentioned it. This would imply that Evan's rather vague location may be another incidental reference to the petroglyphs found near Brown's Island and not some still undocumented site at Wheeling Island. Beyond petroglyphs, researchers during this early era were not solely fascinated with Native American art found along the Ohio River. Archaeological curiosity during the early 19th century also resulted in the identification of another archaeological site just below Brown's Island.

Archaeological Research Conducted Just Downstream from Brown's Island.

In the summer of 2009, I was attracted to an auction liquidating early 19th century manu-

script material. One item was described as a diary written during a trip extending up the Ohio River from Marietta, Ohio. Though not cited by the auctioneer, Wes Cowan, the document proved to be an undated manu-

script travel diary in the hand of Dr. Samuel Hildreth, Marietta, Ohio. Based on internal evidence, the thirty page document was written sometime between 1835 and 1840, most likely in spring of 1835. I later learned the manuscript remained in the Hildreth/ Putnam family of Marietta, Ohio, until June 2009 when it was purchased through Cow-
an's by the Marietta College Library where it is housed today. The travel diary is herein cited as Hildreth (1835).

Samuel Prescott Hildreth (1783-1863) was born in Methuen, Massachusetts (Fig-

ures 9 and 10). He eventually took training at Andover, Massachusetts and became a physician in 1805. He moved to Ohio in 1806 and settled two years later in Belpre, Wash-

ington County, Ohio. In 1808, he moved to Marietta, Ohio. He remained here for the rest of his life where he pursued many scientific interests including geology, paleontology, and meteorology. Hildreth also had an inter-
est in local history and archaeology. In the meantime, he amassed a sizeable collection of reference material. In 1837, he was asso-
ciated with the Geological Survey of Ohio. Hildreth was a frequent contributor to Pro-
fessor Silliman's American Journal of Sci-
ence and Art. As an avid historian, he wrote several volumes on the history and pioneer life of southeastern Ohio. The bulk of his books, letters, and scientific collections, or “cabinet” as they were sometimes called, were donated to Marietta College sometime during the 1850s. Regarding the 1835 travel narrative, the manuscript was only recently reunited with the earlier Hildreth donation. Characteristically, the contents or topics found in this manuscript are in the typically Hildreth style. Thrivingly fascinating to me were two passages written in the same number of days.

In the travel diary, Samuel Hildreth (1835: 3-4) writes:

May 5 Left Marietta at 9p.m. on board the Detroit... 6th May Passed Grave Creek at 11a.m. ten miles below Wheeling at this spot is located the largest mound, so much noticed by writers of the ancient relics of the west, as being the largest of the class of curiosities known on the Ohio River — the eleva-
tion said to be 70 feet — several curi-

ous relics have been taken from its sides by slight excavation but nothing has yet come to light which points to the period or the chapter of its ancient founders — The bottoms or alluvion are here very wide — a small village called Elisabeth after the wife of Mr. Tomli-

son the earliest settler of this land and owner of a large tract of land is seated here — it is a place of some industry and boat building is called on here — It has recently become the county seat of a new county named Marshall...

The fact that Samuel Hildreth mentions a new county named Marshall (i.e. founded March 12, 1835) suggests the diary was penned in 1835. Later, Hildreth also cites that town of Bridgewater, Pennsylvania as
having just been platted and incorporated (i.e. officially on April 2, 1835). Interestingly, this citation also suggests the 1838 excavation of the tunnel and shaft through Grave Creek Mound was not the first attempt to recover artifacts from the great prehistoric mound.

Samuel Hildreth (1835: 4) goes on to state:

reached Wheeling at 12 and left there at 1 p.m. & arrived at Steubenville 6 p.m. went on shore & put up -- called at Judge Tappan...

Samuel Hildreth’s activities conducted the next day would turn out to be far and away more eventful.

May 7 — Visited an interesting collection of human skeletons on the opposite side of the Ohio against the town of Steubenville, supposed to have been placed there... by the Mingo Indians who formerly resided on this shore. This natural sepulcher was accidentally discovered by a person who was working in a stone quarry — the loose stone and earth had fallen down from the side of the hill and covered the mouth of the cavern, which have also been closed by the depositors themselves with fragments of sandrock not only to secure it from the invasion of wild beasts, but also from the curiosity of white men after they had been forced to leave the country of their forefathers. The cave or rather natural grotto in which the bones were placed was originally formed by the action of the atmosphere decomposing the rock by its oxygenating on the time contained in the sandstone.... rain & frost also dislodges the decomposing [rock]...and are still forming masses of these rocks are detached from time to time and fall down the side of the declivity in the bottom below or set on the sides of the river hills.

The rock under which the relics are found is of this description as it rolled down the side of the hill it rested with the cavity underneath it being about eight long by six feet wide and shaped like a large stone — a small opening however was left which by a little enlarging enabled the Indians to enter and deposit these skeletons not less than 50 or 80 in number — they are all ages and sexes and generally in a fine state of preservation — they were probably very ancient sepulture as no relics of a metallic nature were discovered many memorials of their own arts and their affection for their relatives were found consisting of pots and bases of coarse earthware some of which were found with much taste and beauty of outline — they were of various sizes from the capacity of a gallon down to a pint and would average in number probably one for every two skeletons — Some of the utensils contained relics of the food left for their departed person while on their journey to the land of spirits, consisting of the bones of Turkey - opossum & c — Stone pipes more numerous than the vases were also found — some of these displaying much ingenuity in the manufacture one which was carved with a fine head of the eagle done with great force and truth — others were plain made of light color steatite or soapstone — a few were of burnt red clay & some of hard sandstone — Flint arrowheads were also very numerous — a very few of the crania exhibit marks of violence: they appear to have died a natural death and the bones been disposed here often being carefully cleaned from the flesh that once covered them — The spot is too small and too confined to have received them with the feast or to have admitted the friends of the dead without danger of suffocation - a short distance below is a spot called still Mingo Bottom the residence of the celebrated chief Logan whose name has been identified with history by the pen of Thom. Jefferson (Hildreth 1835: 6-12) May 7 Left Steubenville at 4 PM on the S.[Stearn] B.[Boat] [named] Hero for the mouth of the Waltholding and Big Beaver [River] (Hildreth 1835: 13).

Locating an ossuary in modern terminology, or a sepulcher, as penned by Samuel Hildreth, would be an amazing discovery even today. So amazing in fact, one might question the authenticity of the 19th century story. Low numbers of individual graves are known to commonly occur in rock shelters regionally. By contrast, ossuaries with scores of interments, like the one described by Hildreth, are rare in the Ohio Valley archaeological literature though mass graves have been found and described across the lower Great Lakes basin and along the eastern seaboard. Considering available evidence, a certain level of skepticism is healthy since a similar find has not been duplicated scientifically. However, the existence of an ossuary in the East Steubenville neighborhood should not be immediately considered just a fanciful story for two very good reasons. Samuel Hildreth may be considered both a premiere early 19th century scientist and historian working in the Upper Ohio Valley. His authentic voice is without question. Secondly, the discovery was not just a hearsay story. The citation clearly states he visited the site during his stay at Steubenville, Ohio. However, I would concede that corroborating evidence would help eliminate any and all doubt regarding the findings of May 6 and 7, 1835. As a result, the following two questions were asked: Was the site known to the archaeological community of the time? Are archaeological collections from the site still available to confirm the finding and better interpret the site’s origins and cultural context?

The American Antiquarian Society, Worcester, Massachusetts was also interested in ancient sites being reported in the upper Ohio River Valley. In 1820, they had in fact published Caleb Atwater’s treatment on “Antiquities Discovered in the State of Ohio and other Western States.” Then 15 years later, the Society sent its librarian, Christopher Columbus Baldwin, west to further report on burial mounds found in Ohio (Figure 11). Unfortunately, Baldwin seems to be better known for a mishap on the National Road when his trip was cut short soon after entering Ohio. The stage coach on which he was traveling overturned. Baldwin was thrown from the coach, later died, and was buried in nearby Norwich, Ohio. This crossroads community is located some twelve miles east of Zanesville, Ohio. Unlike the man, C.C. Baldwin’s diary did survive and was returned to the American Antiquarian Society. Later, the manuscript was posthumously published in 1901. Baldwin’s trip to Ohio occurred in 1835 and by coincidence sheds some light on the Steubenville affair.

C.C. Baldwin states near the end of his diary:

Tuesday, Aug. 18, 1835. Started at 4 o’clock A.M. for Steubenville...Passed two little villages; one called Florence, and the other Hollyday’s Cove...ferried over the Ohio one mile above Steubenville...Here we took a flat bottom steamer for Wheeling...after we had gotten under way was told of the discovery in the mountain of an Indian grave. Sixty eight entire skeletons found. It was discovered by some workmen who were searching for building stone, and having removed the moss from a large rock upon one side, found a joint or seam, which upon examination turned out to be a door of stone. This being removed furnished ready entrance to a cavity in the rock, where the skeletons were found. The rock seemed to be dug out. The rock was conical in shape from the base, and high enough inside to admit a person to stand erect in. The rock outside was about ten or 15 feet over...The rock was some 150 or 200 feet above the bed of the river in the mountain (Hill 1901: 362-363).

Obviously, the C. C. Baldwin diary helps confirm Samuel Hildreth’s report written three months earlier. Continued research has found substantially more information than the hearsay evidence just cited.

Samuel Hildreth followed many interests and published significantly on various topics from geology, chemistry, weather, natural history, and history to name a few. He was known to have conducted archeological research and during the 1820s, 1830s, and 1840s. Several articles describing the mounds, earthworks, and artifacts found in
It was felt that other corroborative evidence might be found to support Hildreth’s 1835 diary because of his prolific writing ability.

Throughout his life, Samuel Hildreth had amassed a sizeable manuscript collection most now found at Marietta College. Besides the 1835 manuscript, the library’s Special Collection included hundreds of letters received by Hildreth. Subsequently, the collection has been indexed and is listed by year. Since the Ohio River travel diary was known to have been written about 1835, I reviewed the Hildreth index from 1834 through 1840 to identify any other bits of information that might pertain to the Steubenville find.

The Hildreth Collection Index lists three letters which reference the “Mingo Cemetery” site including two from Samuel Morton postmarked Philadelphia (dated May 27, 1835 and July 22, 1835) and a third letter from a Steubenville doctor, John Andrews (dated June 6, 1835). With a Hildreth/Morton connection in hand, an attempt was made to find corresponding letters written by Samuel Hildreth that might be found in the Samuel Morton Collection, American Philosophical Society, Philadelphia, Pennsylvania.

In the first of the letters found at Marietta College, or the one dated May 27, 1835, Samuel Morton, Philadelphia states:

I lately observed in a newspaper a notice of a Mingo Cemetery on the Ohio opposite Steubenville. I immediately wrote to Judge Tappan begging him to get me some crania at such expense as the case might require.

However, Samuel Morton also suggests an alternative plan in case Judge Tappan was absent. Morton goes on to ask:

Could you not send a Student there to make a full collection... and if any of these crania are retained by the neighboring physicians as merely anatomical specimens, I will gladly buy them, or give better heads in exchange.

In response and on June 8, 1835 Samuel Hildreth writes:

It so happened that I was at Steubenville at the period of time when the Mingo sepulcher was undergoing an examination - I was also so fortunate as to procure, two fine crania, a male & female. These I packed carefully in a box & left with Dr. Andrews, to send to me at Marietta - This was on the 6th or 7 May - They have not yet reached me - After the receipt. Of your last letter I wrote to Dr. Andrews to open the box, repack then & forward to you, if they were yet with him & if not to write me, by what boat he shipped them - I also requested him to consult Judge Tappan on procuring more of the bone if possible & packing in a layer box - These crania were intended for you at the time I procured them - I would have taken then with me, but I was just beginning a tour...(Samuel Morton Collection, American Philosophical Society, Philadelphia)

Samuel Hildreth later concludes this letter with the following afterthought:

Should Dr. Andrews have sent the crania to me, I will forward them to you [with] all convenient dispatch - very truly and sincerely your friend S. P. Hildreth.

Two days earlier, June 6th, the Steubenville Doctor John Andrews writes to Samuel Hildreth and explains:

It surprised me to learn that you had not received your box yet, as I sent it soon after you left here... . If it has not arrived when you receive this be good enough to advise me to that effect & I will send word. .. I regret that it is entirely out of my power to furnish Dr. Morton with any specimens in osteology or of the arts, but on enquiry I learn that there has been an entire dispersion of everything taken from the cavern, so as to render all persuit unavailing.

Obviously, Samuel Hildreth’s specimen box was already shipped downriver to Marietta prior to any notification made to Doctor Andrews. As a result, Hildreth assured Samuel Morton on July 19, 1835:

Your favor mailed the 12th inst. was received last evening - in compliance with your wishes I have this day carefully packed the Mingo crania...turtle... and...garrish...the box... is carefully marked the care of Mr. Wilson Pa via Pittsburg & C. Avery and Agden Druggists... and went on board a keelboat this afternoon - Hope they will all reach you in safety... (Samuel Morton Collection, American Philosophical Society, Philadelphia)

In the second July 22 letter found at the Marietta College Library, Samuel Morton thanked Hildreth for procuring two skulls from Steubenville for his collection.

... I am exceedingly obligated to you for procuring me the two Mingo Crania at Steubenville. Dr. Andrews in a letter informs me that he had sent them to Marietta, & adds, that one of the two was the most characteristic skull obtained from the cemetery. Pray don’t let them get lost, which I have feared, inasmuch as I have had no tidings of them. If sent thro’ Mr Avery of Pittsburg addressed to Mr. Wilson of this city they will come safely to hand (Special Collections, Marietta College).

All these men, living along the Ohio River or in the Philadelphia area, were leading scientists of the day. Their activity as outlined in these letters and their prestige would confirm the authenticity of the ossuary site. Today, the least known in this group is Doctor John Andrews, a local Steubenville physician. However the others were rather famous. For instance, Judge Benjamin Tappan (1773-1857) moved to Steubenville, Ohio in 1809 and was prominent in both state and national politics (Figure 12). Tappan is also remembered as a collector of natural history and geological specimens. His “cabinet” was said to be widely respected. Tappan was constantly asked to locate and send scientific specimens to various institutions and individual researchers in the east. As a result of his experiences and expertise, he helped to found the Historical and Philosophical Society of Ohio in 1831.

Upon review of this correspondence it can be emphatically stated Samuel Hildreth’s purpose for laying over in Steubenville was not to visit a newly discovered site. The stop was designed as a visit with Benjamin Tappan in order to view his collection and debate local geological matters. I first conjectured wrongly, the finding was relayed to Samuel Hildreth by Benjamin Tappan and a site visit was made the next day. However, it is obvious that Tappan was not at home during Hildreth’s Steubenville visit. The June 21, 1835 letter penned by Benjamin Tappan now found in the Samuel Morton Papers clearly states:

I was from home (at Columbus) when the Indian cemetery was broken open & on my return found that nothing of value was left – Fortunately Drt. Hildreth was here & procured all the heads which were worth saving & I understand sent them to you -

Thus Benjamin Tappan’s letters proved it was serendipity or fortuitous that Samuel Hildreth made his trip in early May since the discovery was found on May 6 just one day prior to his site visit on May 7, 1835.

Samuel G. Morton (1799-1851), another correspondent, can be considered the most widely known scientist who had an involvement in the ossuary site near Steubenville. Samuel Morton (Figure 13) is first known as a physician and naturalist. More importantly, he was formerly the corresponding secretary of Philadelphia’s Academy of Natural Sciences and a University of Pennsylvania professor. Morton also had an interest in the emerging field of ethnography and is known to have collected both human crania and the skulls of “inferior animals”. Eventually, he amassed 867 human crania from around the world. These specimens were later given to the Academy of Natural Sciences in Philadelphia. They were later loaned to the University of Pennsylvania for research purposes (Renschler and Monge 2008).
Samuel Morton later produced two summaries, “Crania Americana...” published in 1839 and a “Catalogue of Skulls of Man and Inferior Animal...” published ten years later, and both are based on the analysis of the ammassed cranial material. Considering the Steubenville site, there are descriptive inconsistencies between the two accounts that have never been questioned historically. Morton (1839) states in Crania Americana that he received and measured eight crania from Steubenville (Specimens 420, 436, 437, 438, 439, 440, 658, and 687). However, the number could have been as high as nine (i.e. Specimen 723 of the later Calalog is not listed) but more likely only seven (i.e. Specimen 687 is later listed as Peruvian and Specimen 440 is later listed as a Shawnee skull). Based on the later inventory, Morton (1849) most likely acquired seven crania from Steubenville or about ten percent of “Cemetery” assemblage including: the two skulls from Samuel Hildreth, Marietta, Ohio (Numbers 658 and 723); one from Dr. Robert M.S. Jackson (Number 420); one from Dr. McDowell (Number 436); and three from Dr. John Andrews, Steubenville, Ohio (Numbers 437, 438, and 439). Further research may determine how the other skulls were acquired. From a scientific point of view, the measurements and physical documentation provided by Morton is an important topic worth future consideration. It should be noted that one of the Steuben- ville crania was prominently depicted in Cra- nia Americana (Figure 14 and 15) and was further described by Dr. Morton (1839) in his final analysis.

With the site’s prominence well established and its validity affirmed, the pursuit of other reference material seemed warranted. There are solid indications that newspaper accounts might be found as the previously cited letters suggest. With some luck, one might be able to more precisely locate the actual site of the ossuary. It also seems likely one might estimate the age of the site and develop an interpretive context based on the archaeological attributes reported in the various documents written about the site.

It was estimated other references might be found in contemporary papers like the Steubenville Herald, Wheeling Gazette, and/ or Pittsburgh Post-Gazette. The previously cited letters clearly show that published accounts were once in existence. However, these supposed citations were not quickly found. For instance, there is a short gap in microfilm files for the Steubenville Herald found at the Steubenville Library. A similar gap in the files of the Wheeling Gazette was also found from March 16, 1835 through July 1835 in the microfilm file at the West Virginia Division of Culture and History Archives Library; Charleston, West Virgin- gia. Unfortunately, these gaps coincide with the May 1835 discovery and June 1835 reports of the findings. Fortunately however, I later learned that two articles from local newspapers were picked up as by-lines in other newspapers across the United States. For instance, the 1835 Republican Farmer and Democratic Journal published in Wil- kesbarre, Pennsylvania picked up two such articles originally printed in the west (Wyoming County [PA] Historical Society Web- site). The Wilkesbarre, Pennsylvania paper (June 10, 1835) reports the following:

INDIAN CEMETERY. A singular cave was discovered a few days since, among the cliffs on the bank of the Ohio, nearly opposite Steubenville; which, when first opened was nearly full of human skel- etons. Among those relics of mortality, were found stone pipes, arrow heads, and pots of composition, the compo- nent part of which is apparently ground muscle shell. The articles found with the skeletons clearly indicate that they belonged to the aborigines of the coun- try...The cave is within a large rock, which is detached from, and at the base of, the cliff. The rock is about 15 feet in height, and recedes from the base to the top at an angle of about 60 degrees. The aper- ture or entrance to the cave is circular, about two and a half feet in diameter, and is at the base of the rock on its west side. The cave presents the appearance of an arched vault. So regular and perfect is its conformation, which many of those who visited were not satisfied until they made a close examination, that it was not a work of art. It is between thirty and forty feet in circumference. Of its height it is impossi- ble to speak, on account of bones which yet remain, although immense quantities have been carried off by the scientific and the curious, who flock to it daily by hund- reds.—Wheeling Gazette.

The above June 10th article was followed by a second one published on July 8, 1835 which was taken “From the Steubenville Herald”.

AN INDIAN CEMETERY. Walking down Market Street the other day, we met a little urchin with a human skull in his hand. “My lad, where did you get that?” “Over the river, sir, there’s plenty of ’em there there’s a big hole full of ’em.” Upon examining the skull, we supposed it to be that of an Indian—Parting from the boy, we made further enquiry, and found that a cave had been discovered near the base of the hill opposite this town, which had, apparently been used by the Indians as a burial place, and which when opened contained many human skeletons together with frag- ments of stone pipes, flint arrow heads, and pieces of pots or crocks made of a mixture of clay and shell. The cave is about sixteen feet in length, six or eight in width, and five or six in height, and is entirely covered by a rock; the entrance to the cave is in the side of the rock and is about three feet in diameter of cir- cular shape. We understand that 40 or fifty skulls were found, all of which have been removed. - The cave is an object of much curiosity, and has been visited by large numbers of people... It is to be regretted that these last remains of the sons of the forest, have been so rudely seized and widely scattered. It would appear that the red man is not only doomed to be doomed before civilization, but that his bones are not to find even a resting place in that fair land which was once exclusively his own.

Through such accounts and by word of mouth the ossuary site became a novel story and local attraction within days of its discov- ery. The finds infected the thoughts of not just the tutored but all classes as attested by skulls being carried through Steuben- ville by a young boy. Since the name of the “urchin” will always remain anonymous, we may never know if this particular skull would be one ultimately sent to Samuel Morton in Philadelphia. Samuel Hildreth commonly corresponded with Benjamin Silliman (1779-1864) at Yale University. Silliman’s interest com- monly focused on chemistry and geology. In 1818, he conceived and began publishing the American Journal of Science and Arts. As part of the present study, the post-1834 indexes of the American Jour- nal were reviewed to determine if Samuel Hildreth prepared any other articles about the archaeological finds across the Ohio River from Steubenville, Ohio. Though not cited as a Samuel Hildreth article, Volume 31 published in 1837 does contain an article entitled Miscellaneous Observations Made during a Tour in May 1835, to the Falls of the Cuyahoga, near Lake Erie said to be extracted from the “Diary of a Naturalist” (Anonymous 1837). The final published work is 84 pages long and is composed of an eclectic mix of travel information, historic anecdotes, fossil discoveries, descriptions of rock outcrops, and summary informa- tion about geological stratigraphy written in typical Hildreth fashion. Upon comparison, the tour as published was based in part on Hildreth’s shorter and unpublished travel diary of 1835. To compose the final article, the writer and editor must have had access to several diverse documents implying that Samuel Hildreth may have carried two or possibly three diaries in the field with each individually focused on varying topics like history, bedrock geology, and natural his- tory. Obviously the diary now owned by Marietta College was one of the primary sources used to write the 1837 “Miscella- neous Observations... Tour...”.

The letter by Samuel P. Hildreth to Sam- uel Morton dated June 8, 1835 summarizes what specimens were removed from the site. The correspondence also confirms Hild- reth as the author of the “Miscellaneouss Observations... Tour...”. The letter states:

It so happened that I was at Steuben- ville at the period of time when the
Mingo sepulcher was undergoing an examination. I was just beginning a tour through the northern border of the coal measure & I did not reach home until the 23rd of the month. I shall notice this Mingo sepulcher in the cause of my "Visit to the Falls of the Cuyahoga".

A later letter dated July 19, 1835 provides additional evidence that the unpublished diary was designed to be used in the article published in Stillman's American Journal of Science and Art.

I am going on with the manuscript of my "Visit to the Falls of Cuyahoga", and shall have it ready this autumn – I will add many interesting facts, in illustrating the geology of the coal measure, & adjacent formations – I have some very interesting fossils to be described in this paper – also several historical border incidents connected with the early history of the west...very truly yours S. P. Hildreth.

Later on December 29, 1835 Samuel Hildreth further comments on both the crania delivery and the manuscript for the American Journal of Science and Art.

The box with Indian crania etc., have ascertained were safely delivered to Avery, Ogden at Pittsburgh early in September so that I think you may receive them when the canal opens...I have taken the liberty to forward to your care my "Visit to the Falls of the Cuyahoga" - and with it a small bundle of fossils, referred to & described in the article...Please forward the manuscript to Mr. Stillman by the first safe private conveyance...

Mahan Run Burial Site Interpretation

One of my research goals was to create the most accurate site record possible. Available primary documentation was used to locate the ossuary site accurately. Mahan Run appears as a local place-name found on modern topographic maps. As a result, I have designated the ossuary, the Mahan Run Burial Site. The toe of the hillside where the skeletons were found is marked by the course of Mahan Run, i.e. the closest place-name to the actual site location. Conversely, the original place-name "East Liverpool" is nearly lost and the use of this name could create some confusion since it is already used for a well published Late Archaic site once found on the nearby hilltop.

The initial descriptions of the site all agree that skeletal remains were found among the cliffs on the eastern bank of the Ohio River (i.e. now West Virginia) opposite Steubenville, Ohio (Hildreth 1835), or on the hillside (valley wall) overlooking the Ohio River or what is referred to as a "mountain" side by C.C. Baldwin (see Hill 1901: 362-363). Furthermore, the August 18, 1835 Christopher Baldwin citation further states the cemetery site was said to be located between 150 and 200 feet above the river bed.

Samuel Hildreth also states: "The day before I reached Steubenville, an extensive collection of human skeletons... had been found on the opposite side of the Ohio River, a few rods from the shore, and nearly at the point of the town (Anonymous 1837: 8)". I believe the reference to the lower part of the town is referring to downstream and not a low elevation. If the C. C. Baldwin citation can be trusted, Samuel Hildreth's "few rods" might be interpreted as nine to twelve rods from the shore or the equivalent distance of 150 to 200 feet.

Today, the hilltops in the East Steubenville area stand some 350 feet higher than the Ohio River pool suggesting the site was found less than half way up the hillside. The normal river pool based on the appropriate early navigation chart is 625-630 feet Mean Sea Level (MSL). The deck of the Steubenville Market Street Bridge is fixed at 720 feet MSL. If the ossuary overlooked the Ohio River near East Steubenville, it would be found 50 to 100 feet above the elevation of SR 2 and the current bridge deck. Here, a low road cut was found until quite recently when State Route 2 was widened to four lanes in 2002. Now the road cut extends to near the top of the ridgeline and at least 50 foot into the hills side bedrock. If above the elevation of SR 2, the site area would surely be destroyed. Conversely, if the site was found lower, the ossuary may have been removed by earlier highway construction efforts or by the creation of a railroad grade found immediately west of the current highway right-of-way.

The valley wall is truncated just downstream from East Steubenville at Mingo Bottom or where Mahan Run enters the Ohio River at Ohio River mile 68.7. Hildreth also reports the site just upstream from Mingo Bottom. Based on Samuel Hildreth's description, the site was located at the lower end of either East Steubenville, West Virginia or Steubenville, Ohio, and possibly just below the modern Ohio landmark of Slack Street or just downstream of Ohio River mile 68.3.

The previously cited Republican Farmer and Democratic Journal on July 8, 1835 helps bracket the site location by suggesting it was just above Mingo Bottom.

It is considered probable that it has been used as a burial ground, by the inhabitants of the Mingo Village situated on or near Mr. Clarks farm, a short distance below, or that the bodies had been therein deposited after some hard fought battle in the vicinity.

The traditional site of the Mingo Village is on Mingo Bottom just south of Mahan Creek. Clark's farm has not been relocated but a 19th century map (Hayes 1877) mentions "Clark's Ferry Land'g [sic] approximated one quarter mile south of the mouth of Mahan Creek. By extrapolation, the ossuary would be a short distance above the Clark farm or the more easily located mouth of Mahan Creek. However, these various descriptions are not the only references to the ossuary's location.

The just cited Hayes (1877) map which was published 40 years after the discovery also provides a site location though it is unclear how the location information was obtained. The site designation is located just across from the Wells Run sand bar and mouth of a creek by the same name (Figure 16). Today, the former mouth of Wells Run is covered by industrial development but it was once located at Ohio River Mile 68.5. This river mile seems to be an accurate estimate for the original location of the ossuary.

Soon after discovery, estimates of the ossuary's age were being made. Hildreth's writings contend the cemetery might be related to the nearby 18th century Mingo Town on a bottom just below the mouth of Mahan Run. Later, he retracted this conclusion and states: "They [the interments] are most probably of very ancient sepulture, as no relics, implements or ornaments of metallic nature, were discovered (Anonymous 1837: 9)". Upon further analysis of the Steubenville crania, Samuel Morton (1839: 285286) also agreed there was little physical resemblance of the collected crania with those of more modern Iroquois. Thus he concludes:

These heads are thoroughly characteristic of the race to which they pertain. They bear no evidences of great age, and no doubt belonged to individuals of the barbarous tribes. Some have thought the Mingo, who were affiliated to the Iroquois; but the form of the head does not support this supposition...there is little doubt that these skulls belong to the savage tribe, and not to Toltec stock.

Since the period of discovery, we today have the advantage of interpreting sites by association or the individual traits and typological data as measured by artifacts found in context. The most apparent artifact trait associated with the ossuary site is the occurrence of ceramic artifacts. This would imply the site is not culturally related to the nearby East Steubenville Site (46BR31) which is a Late Archaic Period pre-ceramic site related to the Panhandle Archaic Culture, an era at least one thousand years older than the first documented use of ceramics regionally. If additional ceramic data was known and if the tempering agent and/or the vessel form were previously recorded, we would be able to more closely document the temporal period and cultural origin of the ossuary deposit.

The question of temporal origin for the ossuary deposit is partially answered by typological data found in the newspaper articles printed just after the site's discovery. The Republican Farmer and Democratic Journal, Wilkesbarre, Pennsylvania,
has been previously cited and provides two articles on the “Indian Cemetery”, one published on June 10, 1835 with a Wheeling Gazette byline and a second dated July 8, 1835 with a Steubenville Herald byline. The earlier Wheeling Gazette article was found to have been picked up by several papers on the east coast (i.e. Maryland) and the deep south (i.e. Macon, Georgia). The article based on the Wheeling Gazette story (see for example the Mason Weekly Telegraph, June 18, 1835) states:

Among those relics of mortality were found stone pipes, arrowheads, and pot of some composition, the component part of which is apparently ground mussel shells [emphasis mine].

The companion article on the “Indian Cemetery” as reported by the Steubenville Herald (see for example the Wilkesbarre, Pennsylvania Republican Farmer and Democratic Journal, July 8, 1835) reports:

A cave...opposite this town, has been used as a burial place, which when opened containing about 40 or 50 skulls, fragments of stone pipes...arrow heads an piece of pots or crock made of a mixture of clay and shell [emphasis mine].

The use of shell as a tempering agent was a keen observation for the time and must have been made by someone with a scientific bent. This comment and others would suggest that both the Wheeling and Steubenville papers must have based stories on interviews with someone like Samuel Hildreth. In fact, Hildreth generally interprets other accounts as his own. More importantly, this observation is the earliest known citation for the use of shell as a tempering agent in the Ohio River valley. I am aware that in the following decade scientists like James McBride (see the manuscript Volume 1 Drawings and Descriptions of Antiquities in the Cabinet of James McBride dated 1843) sometimes described the type of temper used in pottery vessels found in their cabinet collections.

Squier and Davis (1848: 188) also report “Experience seems to have suggested the means of so tempering the material...accordingly we find pounded shells, quartz, and sometimes simple coarse sand...mixed with the clay”. Later they further describe and illustrate a shell-tempered pot (ibid. 194) from Hamilton County, Ohio. This interpretation may have been based on McBride’s pottery descriptions from southwestern Ohio written between 1843 (the date on the title page of his manuscript catalog) and 1848, which is the publishing date of Ancient Monuments. However, it would be another one hundred years before prehistoric pottery would be formally classified by tempering type and the typological and/or temporal implications of the paste formulation would be commonly understood.

The simple but scientific observation implies the archaeological deposit from the Mahan Run Burial Site was not from the Woodland era but dates to either the Late Prehistoric Period or the Protohistoric Period when shell-tempered pottery was exclusively used. Based on external radiocarbon dates from a number of sites on both sides of the Ohio River, the ossuary site in question would assuredly date later than A.D. 1250. Hypothetically, the ceramic assemblage reported by Samuel Hildreth would have been composed of either Monongahela Plain or Monongahela Cordmarked vessels.

Today, we know the shell tempering was not commonly used until the 13th century. Conversely, the absence of metal particularly copper, brass and iron as reported by Samuel Hildreth would tend to suggest the site dates sometime before the 16th century. This date is based on the widespread occurrence of these metals on Protohistoric Period sites both above the Forks of the Ohio and downstream along the Ohio River mainstem, particularly below the mouth of the Muskingum River. Clearly, the site dates to the latter half of the Late Prehistoric Period and one might hypothesize the site relates to one particular phase of the Monongahela Tradition which can only be demonstrated if evidence of the vessel form and decorative traits were recorded.

The discussion of “Ancient Indian Sepulchre” (Anonymous 1837: 8-10) found in the Miscellaneous Observations...Tour will not be repeated since it is so similar to the original manuscript diary. However, there are one or two critically important additions not found in the original manuscript. Of the thirty or so pots reported by Samuel Hildreth, two or possibly more were collected and shipped to Marietta, Ohio. Though they do not exist at Marietta College today, Hildreth did sketch them and included the drawings as an illustration in the American Journal of Science and Arts, Figure 16 (see Figure 17). Based in the drawing, we can fully interpret the ceramic type found in association with the Mahan Run human remains.

Considering the depicted vessel form, decorative elements, and surface treatment, both pots appear to be typical Monongahela Cordmarked vessels. Monongahela pottery is commonly described as bag-shaped with a well-rounded bottom, a weak shoulder constriction, and a flaring rim. The pots show no distinctive decoration or appendages on the body, also common characteristic of vessels found at Monongahela sites. The two pots are shown with a roughened surface, possibly representing cordmarking. Furthermore, the drawings seem to depict oblique tooling along the lip. Many Monongahela vessels are scarred on the lip with thumbnail decorations or have a periodic marked along the lip made by a cord-wrapped stick. A nearly whole pot (Figure 18) from Marshall County, West Virginia (46MR95) exhibits all of these attributes and appears typologically identical to the ones illustrated by Samuel Hildreth in the previous illustration. Based on the absence of metal artifacts, the occurrence of Monongahela ceramics, the common occurrence of pipes, and the high percentage of grave goods, one can conclude the ossuary was in use between the 14th and 16th century A.D.

In-ground primary interments are conspicuous in the Late Prehistoric archaeological literature from the upper Ohio River Valley. Burials have been typically reported from and around otherwise simple domestic sites. The Samuel Morton Papers (American Philosophical Society, Philadelphia) contains a detailed letter by Benjamin Tappan dated June 21, 1835 which described the “sepulcher” find as something quite distinct, i.e. burials not in earthen pits and not directly associated with a village site. The letter also implies a burial sequence unlike any known or reported locally.

The bones seem to have been deposited at different periods of time and only those on the top were nearly free of decay. They were of all ages & thrown in indiscriminately after the flesh was entirely off. I suppose they afford evidence of a fact often stated that some tribes were accustomed to gather at times all the bones of their deceased relatives & put them in a common sepulcher for it was certain that dead bodies had not been deposited where their bones were found as they could not have prevented such disarray if such had been the fact besides it would have been difficult to have put in a dead body, the entrance was so small & the different degree of decomposition between the upper & lower osseous matter (about three feet apart) show conclusively that the dispositions were made at very different and remote periods...your friend Benj. Tappan

More succinctly, Samuel Hildreth’s final tour article (Anonymous 1837: 10) is collaborative for a far more elaborate burial sequence than a simple interment. He emphatically states: “The sepulcher [at Mahan Run] is too small and too confined to have received them [the deceased] with the flesh on, or to have admitted the friend of the dead without danger of suffocation.” Based on this evidence, we can now conclude the burials were secondary interments meaning each individual had died elsewhere. Later, bone packages would have been brought to the ossuary site but only after the flesh had been removed from the deceased’s body.

Summary
Grave Creek Mound is probably the most well-known archaeological site in West Virginia. Recent writers consider the work at Grave Creek as seminal and the first step leading to modern professional archaeology
show that associated Monongahela bod-
ies were initially deposited above ground
on racks or possibly in some channel struc-
ture; later processed by removing bone from
flesh; then carrying the bone packages to an
off-site location; and eventually depositing
these bone packages in a large receptacle,
or ossuary, like the one recognized by Sam-
uel Hildreth across from Steubenville, Ohio.
If the widespread use of ossuaries in the
area immediately surrounding the Fork of
the Ohio River can be substantiated, the
implication of this ceremonial pattern would
have other more far-reaching interpretive
effects in the archaeological literature. The
alternating ceremonial pattern or the check-
board occurrence of primary versus sec-
ondary interments would obviously create
more obvious cultural boundaries between
known population groups. Obviously, Fort
Ancient and Monongahela cultures would
be more highly distinct. A clearer case for a
distinct cultural boundary between Monon-
ghela and the Susquehannock (Minqua)
would have to be drawn which would dispel
the attribution of certain late Monongahela
sites as the physical representation of the
historic “Black Minqua” people.

We would also have to reconsider the
activities conducted at village sites and con-
sider the possibility for yet interpreted cer-
emonial structures which might occur or
in near village sites. For instance, the pedal-like
structures attached to some Monongahela
houses (see Herbstrott 1983: 109 and 114-
117) may not be granary-like subsistence-
related structural element, but possibly
funerary features. Hypothetically, ancestors
may have been temporarily housed in these
attached structures or until later ceremo-
nal events removed the dead to their final
resting place. Obviously, the original work
at the Mahan Run Cemetery site by such
notables as Samuel Hildreth, Samuel Mor-
ton, Benjamin Tappan, and others are key
factors in any such reinterpretation. How-
ever, Samuel Hildreth’s chance finding begs
an immediate question before Monongahela
burial ceremonialism can be discussed with
greater confidence. Are there other ossuar-
ies to be found in eastern Ohio, northern
West Virginia, or western Pennsylvania?
If such evidence is substantiated, or more
ossuary sites uncovered, we would then be
in the position to further reflect and more
broadly interpret Monongahela ceremonial-
ism in a new light or alternative way.

Acknowledgments:
I would like to thank Amy Kastigar of
the Ohio County Public Library in trying to
secure a copy of Ralph Conly’s 1958 article
on Brown’s Island from the Wheeling Inteli-
gencer. The West Virginia State Historic
Preservation Office, West Virginia Division
of Cultural and History, Charleston, West Vir-
ginia, was contacted to examine the origi-
nal inventory form for the Brown’s Island
site. I would like to thank Jeff Davis of the
West Virginia SHPO office for his assistance.
Brandon Strohi, a former college intern at
the Ohio Department of Transportation,
also aided the research by securing a copy of
Benjamin Barton’s Observations… found
at the Ohio Northern University Libraries,
Ada, Ohio. Access to several of the original
figures used herein was made available by
the State Library of Ohio, Columbus, Ohio
through its general reference department,
the OhioLink library system, and the Ohio-
ana Collection. The 1755 Lewis Evans map
was made available through the Cleveland
Public Library Special Collections, Digital
Gallery. Reference materials were also made
available by the West Virginia Department
of Culture and History, Archives Library,
Charleston West Virginia, by Sandy Day of
the Steubenville Public Library, Steubenville,
Ohio, and by the Special Collection Depart-
ment of the Pontifical College Josephinum,
Columbus, Ohio. Copies of the Republican
Farmer and Democratic Journal, Wilkes-
barre, Pennsylvania were provided by Paula
Radwanski, Wyoming County Historical
Society, Tunkhannock, Pennsylvania.

Most importantly, I would like to thank the
Ohio Historical Society for providing access
to McBride’s journals and to the Academy
of Natural Sciences of Philadelphia allowing
me to copy pertinent portions of the James
McBride Journal found in the William Vaux
Collection. I would like to especially thank
Linda Showalter, Marietta College Library,
Marietta, Ohio, for access to the Samuel P.
Hildreth Papers and other Hildreth source
material within the College’s special col-
lections. Access and use of the Samuel G.
Morton Papers and a copy of “Indian hiero-
glyph” from the Delafield-Benjamin Smith
Barton Collection were provided by the
American Philosophical Society, Philadel-
phia. Design figures from the Brown’s Island
Petroglyph Site were made available by
the West Virginia Archeological Society.

Unwavering support and guidance was
provided by Dr. Ray Swick, Blennerhassett
Historical Park, Parkersburg, West Virginia.
Ray is not only an expert on Samuel P. Hil-
dreth but must be considered one of the
most generous and knowledgeable histori-
ans regarding the early history of the Upper
Ohio Valley. Archaeological concepts in this
article were also discussed with Dr. Jona-
than Bowen, Republic, Ohio. General edito-
rial assistance and miscellaneous comments
were provided by two colleagues, Jason
Watkins, Plain City, Ohio and Megan Shaef-
fer, Hartville, Ohio. Jason greatly assisted in
the preparation of the final figures. The help
received from each of these individuals was
used to keep errors and omissions in the arti-
cle to a minimum. However, any errors which
may still be present are solely my own.
References cited:
Anonymous [usual citation] 1837 Miscellaneous Observations made during a Tour in May 1835, to the Falls of the Cuyahoga, near Lake Erie; Extracted from the Diary of a Naturalist [proved herein to be Samuel P. Hildreth, Marietta, Ohio]. American Journal of Science and Arts 31: 1-84.


Hildreth, Samuel P. 1835 Untitled and unpublished manuscript travel diary beginning May 5 Marietta, Ohio with reference to the Ohio River, Little Beaver Creek, and the upper Cuyahoga River valley. Written in the hand of Samuel P. Hildreth acquired by the Marietta College Library, Special Collections, Marietta, Ohio.


Johnson, William C. 1981 The Campbell Farm Site (36FA26) and Monongahela: A Preliminary Examination and Assessment. A paper presented at the 4th Monongahela Symposium, California State College, California, Pennsylvania.


Morgan, Richard G. and James H. Rodabaugh 1947 Bibliography of Ohio Archaeology. The Ohio State Archaeological and Historical Society, Columbus.


Murphy, James L. 1978 Petroglyphs at the Half Moon Site, Hancock County, West Virginia. West Virginia Archaeologist 27: 50-55

Norona, Delf 1952 Fasimile Reproduction of Squier and Davis’s Account of the Guyandot Picture Rocks Published in Ancient Monuments of the Mississippi Valley...293-299. West Virginia Archaeologist 5: 15-21 (edited by Delf Norona).


Squier Ephraim G. and Edwin H. Davis 1848 Ancient Monument of the Mississippi Valley...Smithsonian Institution, Washington D.C.


Figure 1 (Baker) Portrait of James McBride (after History and Biographical Cyclopedia of Butler County, Ohio 1882).

Figure 2 (Baker) James McBride’s sketch drawing of the petroglyph found four miles above Steubenville, Ohio (courtesy of the Academy of Natural History, Philadelphia, Pennsylvania, William Vaux Collection).
Figure 3 (Baker) Published drawing of the petroglyph found four miles above Steubenville, Ohio (after Squier and Davis 1848 and courtesy of the Ohioana Collection, State Library of Ohio, Columbus, Ohio).

Figure 4 (Baker) Portrait of Benjamin Smith Barton (after the U.S. National Museum Report of 1897 and courtesy of the State Library of Ohio, Columbus, Ohio).

Figure 5 (Baker) Portrait of David Rittenhouse (after the U.S. National Museum Report of 1897 and courtesy of the State Library of Ohio, Columbus, Ohio).
Figure 6 (Baker) Manuscript drawing of “Indian hieroglyphs” or pictographs found in the Benjamin S. Barton’s papers (courtesy of the American Philosophical Society, Philadelphia, Pennsylvania).

Figure 7 (Baker) Eight design figures from the Brown’s Island Petroglyph Site, 46HK8, which correlate with the eight “Indian hieroglyphs” drawn by Benjamin S. Barton ca. 1785 (after Swauger 1969 and courtesy of the West Virginia Archaeological Society).
Figure 8 (Baker) Portion of Lewis Evan’s 1755 map showing the course of the Ohio River and the “Wheeling Cr.” area (courtesy of the Cleveland Public Library, Cleveland, Ohio).

Figure 9 (Baker) Portrait of Dr. Samuel P. Hildreth as a young man (after ... Sketch of the Hildreth Family and courtesy of the Ohioana Collection. State Library of Ohio, Columbus).

Figure 10 (Baker) Portrait of Dr. Samuel P. Hildreth in later years (after ... Sketch of the Hildreth Family and courtesy of the Ohioana Collection. State Library of Ohio, Columbus).
Figure 11 (Baker) Portrait of C.C. Baldwin (after the frontispiece in the 1901 Diary of Christopher Columbus Baldwin...).

Figure 12 (Baker) Portrait of Judge Benjamin Tappan of Steubenville, Ohio. (after Howe’s Historical Collections of Ohio and courtesy of the Cardington Public Library, Cardington, Ohio.

Figure 13 (Baker) Portrait of Samuel Morton (after the U.S. National Museum Report of 1897 and courtesy of the State Library of Ohio, Columbus, Ohio).
Figure 14 (Baker) Superior and dorsal view of one skull from a cave near Steubenville, Ohio (after Morton 1839 and courtesy of the State Library of Ohio, Columbus, Ohio).

Figure 15 (Baker) Lithograph of a skull from a cave at Steubenville, Ohio (after Morton 1839; plate 68 and courtesy of the State Library of Ohio, Columbus, Ohio).
Figure 16 (Baker) Map of the Ohio River Valley (Hayes 1877) which locates the approximate position (right side center) of the “Indian Cave where human skeletons were found” (courtesy of the Special Collection Department of the Pontifical College Josephinum, Columbus, Ohio).

Figure 17 (Baker) Illustration of Samuel Hildreth’s Monongahela-type ceramic vessels from the Mahon Creek Cemetery Site (after the American Journal of Science and Arts 31: 9 and courtesy of the State Library of Ohio, Columbus, Ohio).

Figure 18 (Baker) Typical Monongahela Cord-marked ware from Marshall County, West Virginia (46MR95) on exhibit with the West Virginia State Collections, Moundsville, West Virginia.