The Hensler Petroglyph Site (47 CO 461): an early engraving site in the North American Mid-Continent

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For the past three field seasons the Mid-America Geographic Foundation has been conducting archaeological excavations at the Hensler Petroglyph Site (47DO461) in Dodge County, Wisconsin, USA (Fig. 1). This site contains a single panel, with three faces, along an andalusite schist seam (Fig. 2) through a dome of Waterloo Quartzite (Steinbring & Farvour 1987: 2; Steinbring 2008: 6). When first recorded, the investigators were not aware that the soil formation at the summit of this dome contained a pristine archaeological site, undoubtedly related to the adjacent rock art. While clearing 20 years of vegetation from the surface, artifacts were discovered in rock crevices. Formal excavations were commenced in 2007. These excavations (Fig. 3) have led to a series of tentative conclusions regarding the relationship between the rock art and the cultural content of the deposits.

Fig. 1. The Hensler Petroglyph Site (arrow) is located in the Upper Great Lakes drainage of the North American Mid-Continent.

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Fig. 2. The Hensler Petroglyph Site (47DO461) near Waterloo, Wisconsin, USA. Seam of andalusite schist upon which 33 images are engraved is along the fold on the left side of the outcrop. Excavations are immediately behind the quartzite dome. (Photo J. Steinbring 2006.)

Fig. 3. View to east of excavations at Hensler Site, 2009. Engraved panel is behind excavation (at A). Arrows point to areas exhibiting possible peck marks beneath archaeological deposits. Earliest excavated materials date to ca 10,000 BP. (Photo J. Steinbring.)

The panel itself contains 33 solid, contiguously pecked petroglyphs. The imagery includes an atl-atl weight (commonly called bannerstones) (Fig. 4), projectile points that are superimposed but pointing in opposite directions (Fig. 5), small animal figures, anthropomorphs (Fig. 4), a spiral (Fig. 4), a “weeping eye”, a “thunderbird” (Fig. 6), rectangles, and a net-like figure (Fig. 7). Each year, with changing light angles, “new” petroglyphs are discovered.
Fig. 4. An all-atl image, along with a spiral and a small quadruped. These images are solidly pecked. Scale in left upper corner is in cm. (Photo J. Steinbring 2008.)

Fig. 5. Superposed projectile point images pointing in opposite directions are enhanced to show outlines. The two views face opposite directions. Grazing light is essential for best quality perspective. So far as is known, this conveyance is unique in the Americas. (Photo J. Steinbring 2008.)

Fig. 6. This carefully produced "thunderbird" seems to express more affinity to the Plains than to the Eastern Woodlands. It may have started as a crescent, with the head, wings, and tail added. (Photo J. Steinbring 2008.)

Fig. 7. This unusual net-like figure finds few parallels in Mid-North American imagery. It has framing lines and is contiguously pecked in a common Archaic manner. (Photo J. Steinbring 2008.)

There are serious conservation issues with this site. It lies within a privately owned, operating quarry. Lichen encroachment is advanced, and minute quartz particles, not to mention occasional small blast rubble falls on or near the engraved surface. The site is on the U.S. Department of the Interior National Register of Historic Places, and has recently been recorded on the International List of Threatened Sacred Sites. The quarry operators have constructed a huge berm around the site, without drainage. This berm collects rain water which has inundated a newly discovered part of the site and which leaves portions of the new area covered with mud.
The excavation

Since work at this site is limited to one day per week, less than 1.0% of the projected area of the site has been excavated. Any future plan will require work at night because of the quarry. At present eight 1.0m² units have been completed and the inventory well exceeds 2,000 artifacts, most of which consists of retouch flakes. There is no refuse bone, no hearths, no pottery, or any other signs of a typical domestic site. It appears that the occupants were present for some purpose related to the immediately adjacent rock art, and that lithic tool refurbishment was an important aspect of that activity. The remains of this function are best evidenced (so far) in the units closest to the rock art.

An unusual finding is what is being called “expedient imagery”. Sustaining the theory that the occupations relate to the rock art, these objects consist of only slightly modified natural stones resembling animals (Fig. 8) and birds (Fig. 9), and possibly a phallus. It would appear that these were selected for what they appeared to be and possibly used in rituals pertaining to nearby rock art. All of them were found in secure stratigraphic positions. One of them was cloven so as to lay flat (Fig. 9). Also on the engraved panel, there is a quartz vein thought by some to resemble an “eagle”.

![Fig. 8. A pebble selected for its resemblance to a bison from Hensler excavations. (Photo J. Steinbring 2007.)](image1)

![Fig. 9. A bird or serpent-like stone, cleaved in half longitudinally so as to be placed flat on a surface, from Hensler excavations. (Photo J. Steinbring 2007.)](image2)

Diagnostic lithics consist of projectile points, prismatic blades, and gravers. There are no scrapers, again suggesting a non-domestic function for the site.

Projectile points are infrequent. They occur mostly in the lower levels and are readily classifiable (Fig. 10). In an orderly stratigraphy, the point styles appear in a uniformly ranked sequence. Side-notched types occupy the earliest levels, with large, Raddatz Side-Notched (Wittry 1959: 44) being lowest, and a Matanza-like point in the upper part of the lower strata. The lowest recovery so far is a prismatic blade (Fig. 11) of Knife River Flint, which outcrops in North Dakota (Porter 1962: 267). This blade has been extensively used, to the point that the longest cutting edge is quite dull. This style of blade is commonly associated with early horizons in North America (Waldorf & Waldorf 1962).
The patina is a laminated milky deposition seen on many such tools in the Northern Plains. It is commonly observed in late Paleoindian projectile points, a fact which accords well with the onset of the Altithermal which would see rapid evaporation in hot arid zones resulting in such laminated patinae. Researchers are experimenting with dating such patina with methods similar to obsidian dating. The inventory was searched for flakes of this material. Six retouch flakes of it were found, mostly in the lower levels. A nearby quarry-workshop site (47DO727) from which most of the lithic raw material at Hensler was derived contains no Knife River Flint. The presence of this and a few other exotic materials at Hensler might suggest distant travelers coming to the site as pilgrims to the rock art site.

![Fig. 10. Early lithics from the Hensler Site (47DO461) and immediate vicinity. 1. Thebes projectile point (47DO727); 2. Dalton projectile point (47DO727); 3. reworked fluted projectile point (47DO461-South Field); 4. Raddatz projectile point (L12 E5S1, 47DO461); 5. Shoulder section of Hell Gap-like projectile point (L12-13 E6S2); 6-7. Burins (L5-6 E5S1, 47DO461); 8. Graver (L5-6 E5S2, 47DO461); 9. Graver (47DO727). (Photos J. Steinbring 2010.]

![Fig. 11. Views of a prismatic blade recovered from Level 12, E62S at the Hensler Site. The blade has been extensively used, to the point that it is quite dull. It is 5.2cm. long. The material is Knife River Flint, which outcrops in North Dakota. It is actually petrified wood, identified microscopically by the cell structure (Porter 1962: 269).]

The soils and their meaning

The stratigraphy consists of two main members, an upper zone consisting of a black to brown organic soil, with at least two divisions, and a lower tan unit also with at least two divisions. The upper organic soils contain the later materials and four radiocarbon dates for it cluster in the AD 1000 ± 100 range. This would support the iconography of the panel pertaining to the Mississippian Period. The “weeping eye” is a hallmark of this cultural episode (Diaz-Granados & Duncan 2000: 93; 2004). There is one representation of it on the engraved panel. The tan zone is composed of loess, with possibly two episodes. This aeolian deposition follows deglaciation in this area, and the densest Wisconsin accumulations of it are in this area of the state. A mid-point date of about
9,000 yrs. BP would be appropriate for this loess deposition, and would be consistent with the large side-notched point tradition evidenced in the lower division of the tan member. The prismatic blade of Knife River Flint lies below this, however, and clearly suggests an earlier occupation. All of the early artifacts lie above an area of apparently eroded peck marks (Fig. 12). This would suggest an immediately post-glacial episode of engraving –probably ca 10,000 BP.

**Fig. 12.** The remains of deeply eroded dints in E5S1, beneath all cultural levels. This suggests an épisode of aeolian abrasion prior to the deposition of loess, and strengthens the possibility of 10,000 year old rock art at the Hensler Site (47DO461). *(Photo J. Steinbring 2009.)*

Two areas beneath the soil mantle appear to contain these residual dints, the possible remains of highly eroded markings. These are in the form of non-contiguous pits, the deeper ones remaining after being scoured by abrasive quartz-laden winds on this exposed, non-vegetative prominence. The sequence deduced from these factors is: deglaciation, site selection, marking, extensive abrasion, renewed (or continuous) occupation with ritualism in relation to the main panel.

**Site selection**

Phenomenal attributes (Steinbring 1992: 102) are those things which are beyond the ordinary, and which probably attracted aboriginal populations to a particular location. For Hensler there are several and they are striking. Firstly, the Waterloo Quartzite dome was a high prominence with wide vistas, including the confluence of two regional rivers. It contained many odd shapes, especially the long groove containing the andalusite schist seam, very possibly taken as a female fertility symbol (Fig. 2). The site has long been
known by the local citizens as an area of frequent and powerful lightning strikes. The effects of this are found constantly throughout the excavations in the form of innumerable broken pieces of schist blasted and scattered by these strikes throughout the site. Another phenomenal attribute is what is called “acoustic effect” (Waller 1993: 91; Allan & Waller 2010: 103). This is a deep resonant drum-like sound created by stamping on the ground around the site. It is especially notable along the east side of the engraved panel. In surveying the site, a magnetic anomaly was also encountered, being in a position to yield a flaw in the exact orientation of the petroglyph panel by 4.0 degrees. This phenomenon has been identified at other North American sites (Benson & Buckskin 1991: 53).

With an array of this many phenomenal attributes, it would be difficult to dismiss their role in initial site selection, and their function in the continuity of site utilization.

Implications

The Hensler Petroglyph Site may offer more than most known North American sites for the illumination of timing and behavior in relation to rock art. The use of this many phenomenal attributes at so early a time has no known precedent in the Americas. With only 1% of the site excavated, the promise of additions to such knowledge is profound. The reconstruction of regional relationships by lithic identification can lead to an assessment of pilgrimage theory, something that has gone largely untested in rock art sites.

Above and beyond the clinical aspects of archaeology reign the objectives of art history itself. It does not seem unreasonable that further excavations can reveal more of the intangible elements of art itself in the ordered development of ceremonial imagery. The need to employ perceived forms in the non-material aspects of life offers depth to our understanding of these behaviors. Again there appears to be little, if any, precedent for this.

All in all, the Hensler Site, through its limited revelations, becomes a treasure of human proportions, one which must be saved for all, lest its insights be obscured by natural and cultural impingements, perhaps most importantly man’s most basic fault – greed.

BIBLIOGRAPHY


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