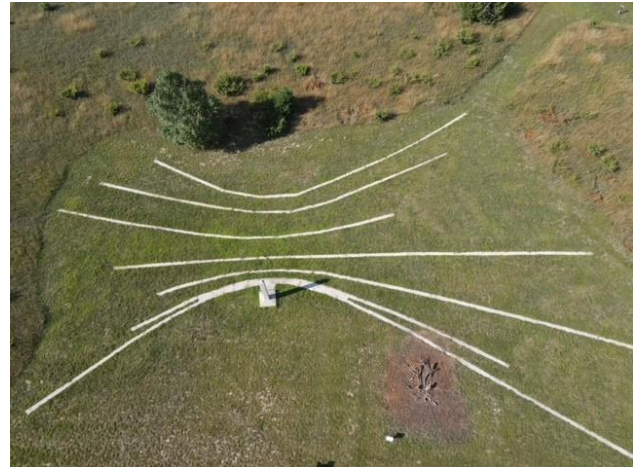


WHERE **SCIENCE****HISTORY****AND****ART** CONNECT

To: Raven Hill friends  
From: Cheri  
Date: August 17, 2024  
Re: *Marking time*

The phrase "the ebb and flow of time" refers to the natural and often cyclical movement of time. It suggests a rhythmic quality, as evidenced in the continual patterns seen in our natural world. The marking of time has been a common human endeavor over the years, reflecting a deep need to understand the world, survive within it, and find meaning in the cycles that govern our lives. Cultures around the world have noted the passage of time as essential for their survival, spiritual beliefs, social organization and understanding of the cosmos. Three of those cultures are represented here in Raven Hill's Ancient World exhibit. Ancient Egyptians built many obelisks. North American Indigenous cultures created the Great Serpent Mound. The British Isle's Neolithic people are credited for constructing Stonehenge.

Obelisk Arcs



The arcs shown above show the path of the sun's shadow each month of the year with June being closest to the obelisk and December being the one furthest out. The shadows follow a cycle with January and November being the same arc, as the shadow gets longer (November) or shorter (January).

Great Serpent Mound



The Great Serpent Mound of Raven Hill is made of field stone instead of being an earth effigy like the actual one in Ohio. It still lines up with sunset at the Summer Solstice like the actual one!

The ancient Egyptians ingeniously used obelisks as both sundials and calendars, integrating their architecture with their understanding of time and celestial movements. The Great Serpent Mound was used as an astronomical and ceremonial site. The serpent's curves align with the solstices, equinoxes, and possibly lunar events. The head of the serpent is aligned with the setting sun on the summer solstice, while other parts of the mound correspond to the winter solstice and other significant solar positions. Stonehenge is believed to have been used as a ceremonial and religious site, likely connected to solar and lunar observations. The monument's stones align with the sunrise on the

summer solstice and the sunset on the winter solstice, suggesting it functioned as a kind of calendar to mark these and other important events.

Early cultures kept track of time for multiple reasons. The first and foremost practical reason for marking time was agriculture. Knowing when to plant, harvest, or prepare for seasonal changes was crucial for the survival of early societies. Second, acknowledging spiritually significant dates, often aligning with solstices, equinoxes, or lunar phases was important. Third, societies could then honor their gods and ancestors on a regular basis. Fourth, marking time was important for organizing and unifying communities, including fostering social cohesion and reinforcing cultural identity with festivals and rituals. Fifth, tracking time was a method for sharing schedules for work, rest and celebration, thus giving a structure to daily life. Finally many ancient cultures sought to understand their place in the universe. Tracking celestial movements was a way to connect with the cosmos. Observing and marking the passage of time through the movement of the sun, moon, and stars provided a sense of order and predictability in a world that was often unpredictable.



Ancient rulers and religious leaders often used timekeeping as a way to assert their power. By controlling the calendar and the timing of rituals and festivals, leaders could reinforce their authority and connect themselves to the divine gods. This control over time was a way to “predict” the future, legitimize their rule and maintain social order. Marking time also allowed cultures to pass down knowledge and traditions through generations. By creating systems to track years, seasons, and significant events, societies could preserve their history, ensuring that future generations understood their heritage and maintained continuity with the past.

**NOTE:** Fuller Road will close this Monday, August 19 for the Deer Creek bridge replacement. Raven Hill will host a **Pop-up Main Museum** in the Open Space located before the road closure for the duration of construction. Entrance is off Pearsall Road near the junction of Fuller and Pearsall. Admission will be \$5 per person and there will be light, sound, motion, magnets and the animals—a smaller version of the Main Museum. Visitors can also take the 3-mile detour to the Center and explore the outdoor exhibits. Reservations can be made to visit the Main Museum building during bridge construction.

There will be a ribbon-cutting for the **Pop-up Main Museum** on Monday morning at 11:30am. You are invited to join us and check everything out!

Cherí

PS---Thanks, Matt McLeod for the great drone pictures!