THE GREAT HOPEWELL ROAD: A BIASED ASSESSMENT THIRTY YEARS ON

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Abstract

The Great Hopewell Road was a parallel-walled avenue of remarkable straightness that began at Newark's Octagon Earthworks, and which I proposed originally extended as far south as Chillicothe. Based on various lines of evidence, I further argued that it served as a pilgrims' road linking the Newark Earthworks and the cluster of roughly contemporary earthworks in the Scioto Valley. This proposal generated a great deal of scholarly and public interest, and the Great Hopewell Road was a component of the justification for the Outstanding Universal Value of the Hopewell Ceremonial Earthworks World Heritage Site. This review examines the varied responses of the scholarly community to this proposal and assesses the evidence and arguments for the road and its proposed purpose. It also considers possible explanations for why the proposal has attracted so much public and media attention.

> In the last twenty-five years, nothing has garnered more public or media attention than the Great Hopewell Road,…and we must collectively ask ourselves why this is the case and how do we bottle it!
> Mark Seeman (2020)

I did not discover the Great Hopewell Road. Its "discovery" was more of a gradual reveal, first proposed by Caleb Atwater in 1820, followed by on the ground verification by James and Charles Salisbury in 1862, and finally aerial observations by Warren Weiant Jr. in 1931. But I did give it the catchy name and developed an argument for why it was built, what it might have meant to its Indigenous builders, and what it implied about the nature of the Hopewell Interaction Sphere (Lepper 1995a, 1995b, 2004, 2006, 2010a). So, I may be uniquely positioned to contribute to an answer to Mark Seeman's (2020) questions quoted in the epigraph to this paper.

Opinions about the Great Hopewell Road proposal have ranged over the years from enthusiastic acceptance to vigorous rejection with most falling somewhere in between. Virtually no one has disputed that there was a wide avenue of parallel earthen walls that once extended from Newark's Octagon Earthworks for a distance of, at least, "nearly two miles" (around 3 km) "towards the south" [actually the southwest] (Squier and Davis 1848:70). If true, this would place the end of the road at or near its intersection with Ramp Creek, a tributary of the South Fork of the Licking River. Such a termination would be consistent with many other parallel-

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walled avenues at Hopewell earthworks, such as those at Portsmouth, Marietta, and Hopeton (Lepper 2025). Indeed, two of Newark's other parallel-walled roads led to the two other streams that, together with Ramp Creek, more or less encompassed the earthworks (Lepper 2004:76). But if the "Great" Hopewell Road ended at Ramp Creek, there wouldn't be much to discuss other than why it was given such a pretentious name.

I came up with the name back when I first encountered the extraordinary map of the Newark Earthworks, and the associated hand-written manuscript, created by James and Charles Salisbury in 1862 (Figure 1). Unlike Charles Whittlesey, Ephraim Squier, and Edwin Davis—joint creators of the iconic map of the Newark Works published by the Smithsonian Institution in 1848 (Figure 2), the Salisburys lived in Newark and so were able to devote the time necessary for a much more comprehensive survey of the Newark Earthworks (Salisbury and Salisbury 1862). As part of that project, the brothers traced the parallel walls that led from the southeastern opening of the octagonal earthwork off to the southwest for at least six miles (9.7 km), "over fertile fields, through tangled swamps and across streams, still keeping their undeviating course" (Salisbury and Salisbury 1862:15). They did not follow the road to its terminus but noted that "its course if continued would lead near Circleville & Chillicothe" (Salisbury and Salisbury 1862:15). To me, this sounded a lot like the long and very straight Ancestral Puebloan roads I had seen at Chaco Canyon when I was an undergraduate at the University of New Mexico. One of these had been christened the Great North Road, which, according to Stephen Lekson (2016:123), was named for the "famous Roman road in Britain" that led from London to York. Based on the intriguing similarities between the Chacoan and Hopewell roads, I adopted the name as a nod to the possibility that these similar roads might have fulfilled similar functions for their respective societies.

I first used the name Great Hopewell Road in conference presentations beginning in 1992, but it only achieved common currency in 1995 when *Archaeology* magazine published my article "Tracking Ohio's Great Hopewell Road" (Lepper 1995a; also see Lepper 1995b), in which I proposed that the road extended nearly sixty miles (97 km) and connected the Hopewell ceremonial center at Newark with similar earthworks in the Scioto Valley.

I decided to send the article to *Archaeology* magazine rather than to a peer-reviewed journal for a number of reasons. First of all, having shared all my research with Roger Kennedy, then the Director of the Smithsonian Institution's National Museum of American History, for a documentary series he was working on entitled *Roger Kennedy's Rediscovering America*, I found that he was also writing a book that would be titled *Hidden Cities: the discovery and loss of ancient North American civilization*. Over several months, he shared multiple drafts of the chapter that incorporated my research, and I was growing increasingly concerned that Roger, given his prestige and platform, would end up with the lion's share of the credit for the rediscovery of the Great Hopewell Road. I struggled for a way to ensure that I could honorably establish priority for that rediscovery.

If I had decided to write up a paper for a peer-reviewed journal, it would have taken time for the manuscript to wind its way through the evaluation process; and in any case, I wasn't at all sure that the research was ready for prime time. Also, I was not a tenure track university professor, so I had no need to crank out papers in peer-reviewed journals in order to get

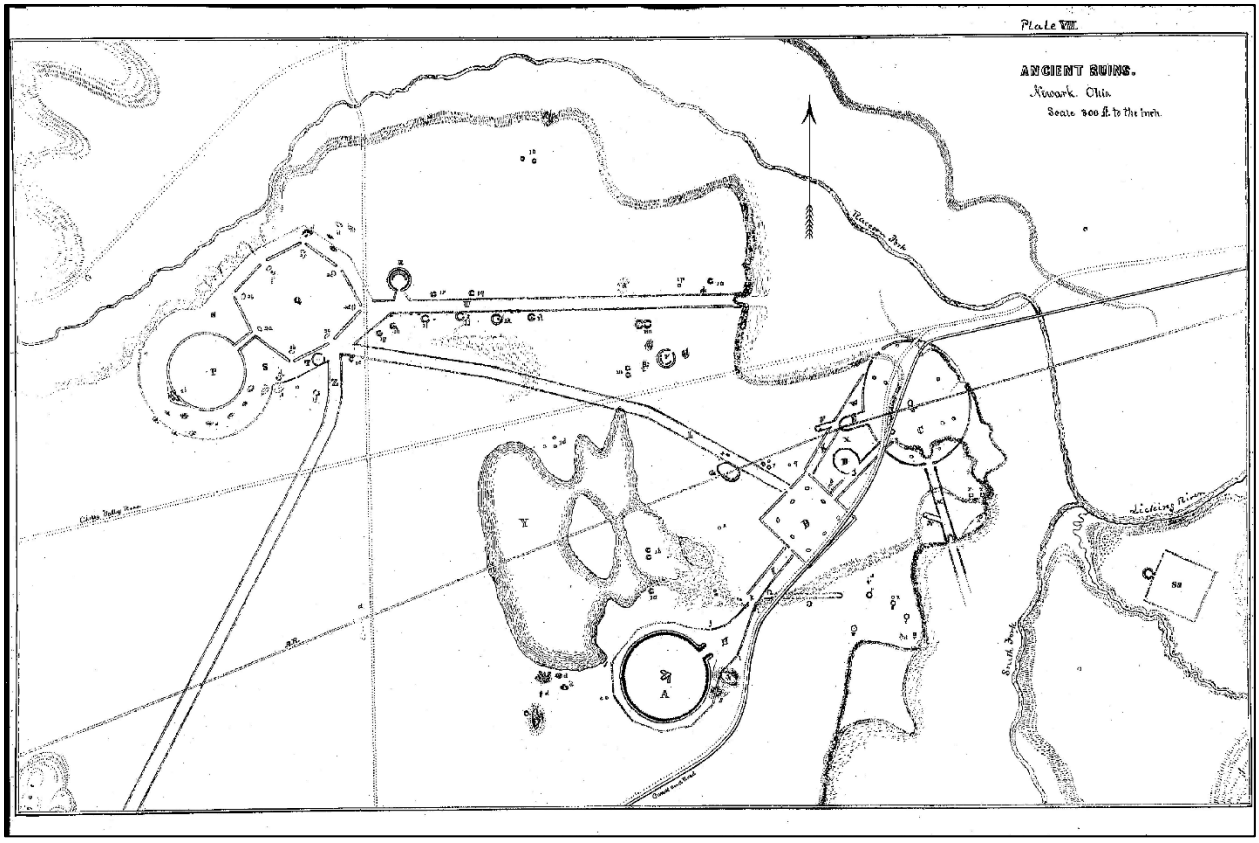

Figure 1. Map of the Newark Earthworks as surveyed by James and Charles Salisbury in 1862. It is the most comprehensive and complete known map of the Newark Earthworks; and it was accompanied by a detailed description of each component of the earthworks. (Courtesy, American Antiquarian Society)

tenure. I was a museum archaeologist and one of my primary obligations was educating the public about the amazing Newark Earthworks. Therefore, an article in a credible, popular magazine like *Archaeology*, published by the Archaeological Institute of America, provided a way of accomplishing both of my goals: establishing priority for my research, and getting the public excited about the Newark Earthworks. Seeman's epigram would suggest that I accomplished my mission—and then some.

The publication of my article was followed, in 1998, by the Public Television documentary, "Searching for the Great Hopewell Road," which was conceived and produced by Tom Law, with the support and cooperation of many Hopewell archaeologists.

Given the ensuing, and oddly enduring, wave of public and professional interest in the idea of a Great Hopewell Road (Seeman 2020:316), I thought it might be worth a look back to assess what we've learned over the past thirty years. Is there any consensus that the road extended substantially beyond the "nearly two" (or "2 ½ miles") asserted by Squier and Davis (1848:70, and facing page 67)? Does anyone (other than me) think the road went all the way to Chillicothe? Does the interpretation of the road as a formal pilgrims' processional way make sense? And, finally, why has this long, linear earthwork resonated so powerfully with the public and media?

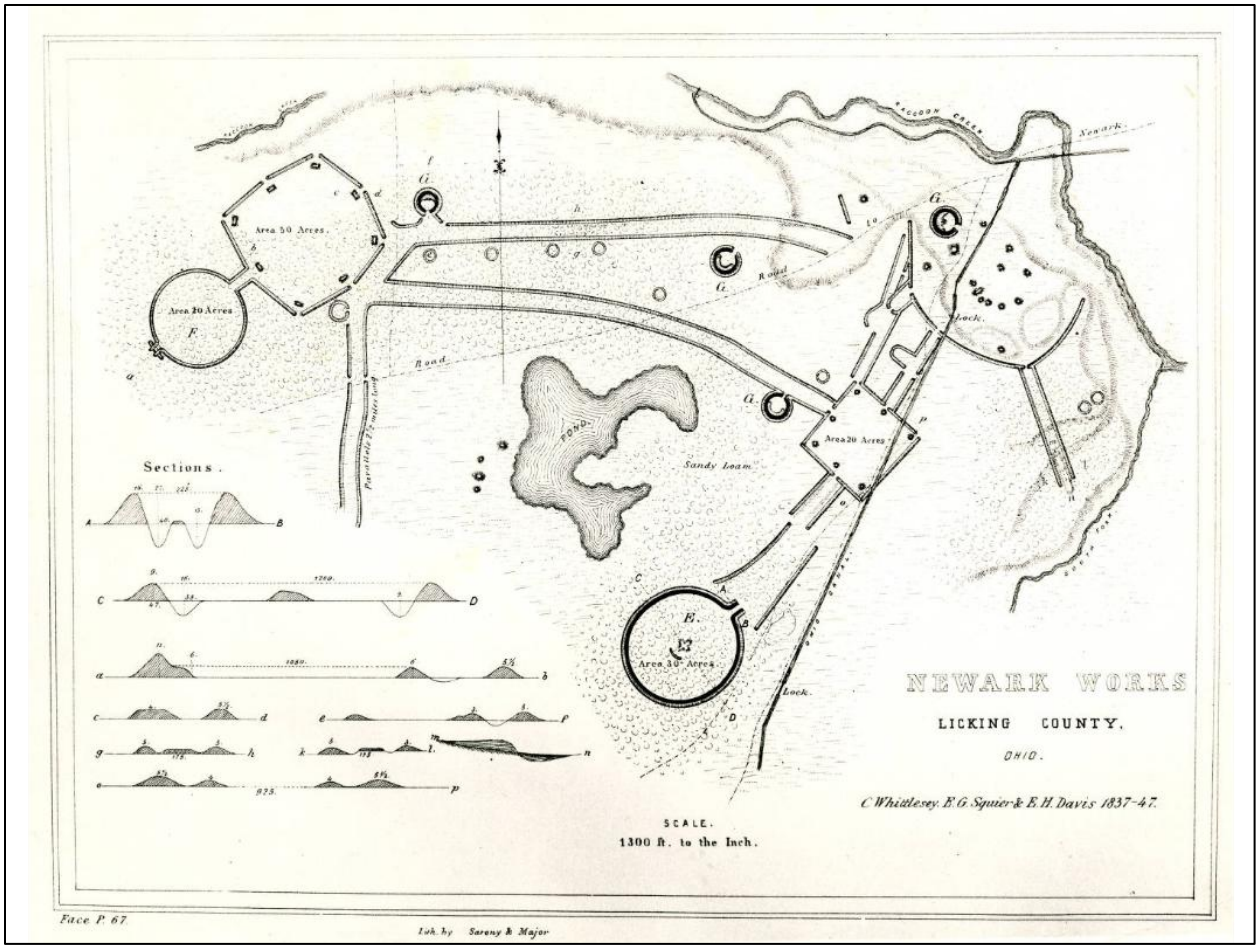

Figure 2. Map of the Newark Earthworks as surveyed by Charles Whittlesey, Ephraim Squier, and Edwin Davis between 1837 and 1847. (Courtesy, Ohio History Connection)

Truly Great, or Just Middling?

In 1987, around five years before my first conference presentation on the Great Hopewell Road, civil engineer James Marshall (1987:38) wrote that "the parallel earthen walls" depicted on the Squier and Davis map (Figure 2), had been found to "extend southwest to the Creek" by Dache Reeves (1936). He noted that, contrary to the sinuous course of the walls on the Squier and Davis map, they actually were straight for the two-and-a-half-mile section between the Octagon Earthworks and Ramp Creek (1987:38). Moreover, Marshall (1987:38) identified "an additional one-mile-long section south of the Creek that is very straight too." In the caption to his figure showing the extension on a modified version of the Squier and Davis map, Marshall (1987:45) observed that the "long parallel walls point in direction of High Bank Works 69 miles away." He evidently had looked unsuccessfully for additional evidence that the walls extended even farther, for in August 1993, after an article on my research was published in the Ohio Historical Society's (now the Ohio History Connection) *Echoes* newsletter (Norris 1993), Marshall sent me a letter in which he indicated that he had "examined many air photos of the area in the line of those walls all the way past Baltimore … to about 3 miles north of Amanda," but he had found "no walls." Therefore, he dismissed my proposal of a Great Hopewell Road. I

found this reaction a bit surprising. Given that he had documented the one-mile extension of the walls south of Ramp Creek, which was an important discovery for which he has not been given sufficient credit, why would he assume that there could not be evidence, of which he was unaware, that might show that there were indeed walls farther south than he had looked. The Salisbury manuscript, for example, established that Marshall was, in fact, wrong about the walls ending only a mile south of Ramp Creek. Marshall, however, was highly opinionated; and was also critical of the "astronomical alignments claimed to exist" at Hopewell earthworks (1995:4). On the other hand, he claimed to have identified a "mathematical linkage between Liberty Township, Seip, Newark, High Bank, and Baum Works," which he interpreted as "evidence of the work of a residential school of Pythagoreans" (1996:218), so he was by no means averse to radical ideas.

In contrast to Marshall's overwhelmingly negative appraisal, David Hurst Thomas (1994:142) referred to the Great Hopewell Road proposition as an "exciting" possibility but observed that "Lepper's findings remain tentative, and many archaeologists are suspending judgement until more convincing data are available." At around the same time, Roger Kennedy (1994:54) argued that "the evidence on the ground is impressive and so is the fact that larger portions of it [the Great Hopewell Road], now destroyed, were still to be seen in the nineteenth century." Kennedy (1994:273) even proposed that there was an extension of the road from the "Mound City-Hopeton-Cedar Bank-Dunlap complex" all the way south to the Portsmouth Earthworks (1994:56-58). Squier and Davis (1848:78) observed that a parallel-walled road extended from the Portsmouth Earthworks (Figure 3) to the "north-west for a considerable distance" and "may have communicated with other works in that direction," so Kennedy's proposed Chillicothe to Portsmouth Road certainly is worth further research. It should, however, be regarded as a separate proposition and evaluated on its own merits.

From a two-decade vantage, Mark Lynott (2015:152) recalled that "when Lepper first proposed the Great Hopewell Road model, informal discussions among scholars seemed to reject it as implausible." One of these scholars was the inimitable Olaf Prufer. In his closing comments on the assembled papers for a volume devoted to the Ohio Hopewell culture, which included a paper I contributed that mentioned the Great Hopewell Road (Lepper 1996), Prufer (1996:416) declared:

> I…part company with Lepper when it comes to his discussion of the so-called Great Hopewell Road, 40 m wide and flanked by earthen embankments which, so he believes, ran over a distance of 90 km, o'er rugged hills and through the glens, from Newark, Ohio, to the Hopewellian heartland near Chillicothe. Apart from the general unlikelihood that such a highway ever existed, there is, as far as I know, no concrete evidence whatsoever in support of such a line of communication.

The initial skepticism of scholars such as Prufer isn't hard to understand. My first publication on the subject was in a magazine intended for a general audience rather than a peer-reviewed journal; and this was followed by the Public Television documentary "Searching for the Great Hopewell Road" in 1998. Moreover, the evidence I marshalled consisted mainly of nineteenth century surveys and twentieth century aerial imagery. The aerial imagery of the four locations that I used to support the existence of the Great Hopewell Road included archival

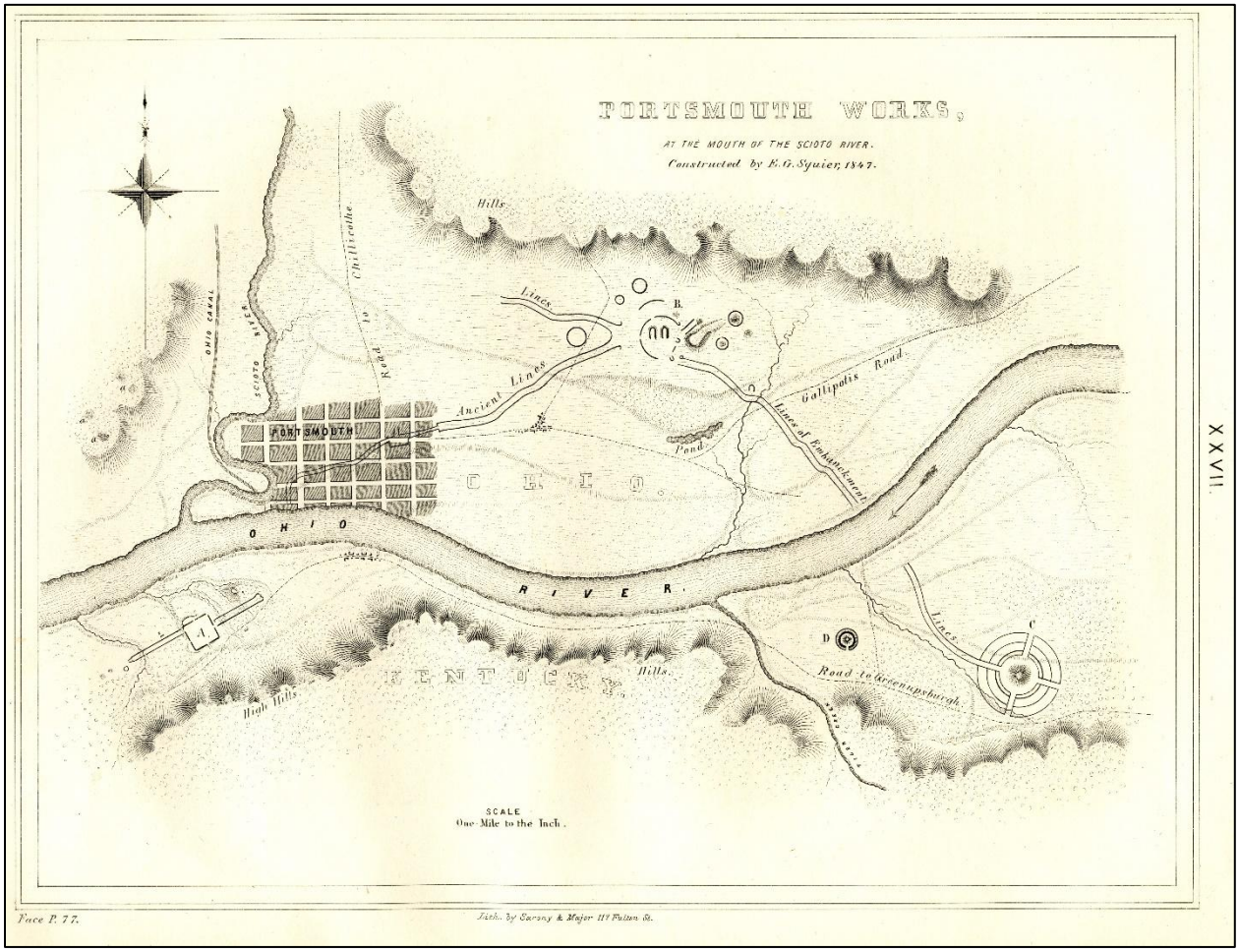

Figure 3. Map of the Portsmouth Earthworks as surveyed by Ephraim Squier, and Edwin Davis between 1847. Note the parallel walls extending to the "north-west for a considerable distance." Squier and Davis (1848:78) suggested that they "may have communicated with other works in that direction." (Courtesy, Ohio History Connection)

photographs, including infrared imagery, as well as photographs taken during aerial reconnaissance of the proposed route (including a helicopter ride with Roger Kennedy), in which I identified short segments of parallel lineations in the soil, i.e., crop marks, that I believed might be traces of road remnants (e.g., Lepper 1996:235). I now concede, however, that at least three of these identifications represent subjective data selection and would require further investigation before they could be offered as valid evidence for the Great Hopewell Road.

Nevertheless, the combined observations of Caleb Atwater, the Salisbury brothers, and Warren Weiant, Jr., provide convincing evidence that the Great Hopewell Road extended beyond the two miles to two-and-a-half miles proposed by Squier and Davis. And as I began to weave all of this together with comparative analyses of other Indigenous American roads and presented my evolving arguments in a number of papers in various scholarly publications (Lepper 1996, 2000, 2004, 2006, 2010a), colleagues began to take the possibility of such a road more seriously. Indeed, Lynott (2014:152) observed that as Lepper "has continued to make his argument, the

notion of some type of pathway or route from Chillicothe to Newark seems to be gaining greater acceptance. It is, at a minimum, a testable hypothesis."

Brian Fagan (1998), in a book on "the science of sacred sites" intended for a general audience, observed that many Hopewell earthwork sites "occurred in pairs, sometimes on either bank of a river, or some kilometers distant from one another" (1998:203). He suggested that the "most extreme example of this pairing" was Newark's Octagon Earthworks and High Bank Works, which may have been "linked by a causeway" that had been named the "Great Hopewell Road" (Fagan 1998:203).

In 2000, archaeologists James Bayman and Miriam Stark selected my *Archaeology* article for inclusion in *Exploring the Past: Readings in Archaeology*. In the preface to their book. Bayman and Stark (2000:ix) wrote that they selected readings "drawn from academic and popular venues" which they thought best captured "the excitement and breadth of contemporary archaeology." That certainly is no explicit endorsement of the existence of a sixty-mile-long Great Hopewell Road, but it was nonetheless a recognition that the research was worthy of serving as an example for students.

Anthony Aveni (2000), in his book devoted to solving the mystery of the ground drawings of ancient Nazca, stated that he "found the most interesting parallel of all between Newark and Nazca…in a perfectly straight, long road connecting the Hopewell enclosures to an almost identical site in Chillicothe, Ohio, 60 miles to the southeast [sic] on the banks of the Scioto River" (2000:224). So Aveni accepted that such a Hopewell road existed, but did not refer to it by name.

Peter Nabokov (2006:40), in his book on Native American sacred places, stated that the Great Hopewell Road "ran for about sixty miles…and linked the prominent monuments of Newark in the north and Chillicothe to the south." He did, however, acknowledge that "confirmation of this sixty-mile via sacra awaits further investigation" (2006:40).

Giulio Magli (2009), in a review of ancient sites around the world that are aligned to the movements of celestial bodies, accepted that the Great Hopewell Road likely extended "for over 90 kilometers" (2009:127) and that "we can reasonably conclude that the grand complex formed by the two huge circle and octagon observatories of Newark and High Bank and by the straight 90-kilometer, 60-meter-wide road connecting them was conceived as a single project" (2009:129).

Ray Hively and Robert Horn (2010) observed that "design similarities" between Newark's Octagon Earthworks and High Bank Works indicated important cultural connections between these regions (2010:137). They acknowledged that "there is some evidence" that the Great Hopewell Road "extended in an undeviating course for at least 12 miles," but as to whether it may have extended "all the way to Chillicothe is currently a matter for continued research" (Hively and Horn 2016:79). They declared, however, that it is a certainty "that the Hopewell had the ability to extend straight lines (for the planning and construction of earthen walls) for distances of several miles" (2016:79).

N'omi Greber (2006:103), while avoiding any direct reference to the Great Hopewell Road, noted that a hypothetical trail connecting each of the Hopewell earthwork sites "where a true square is recorded" would follow an actual trail documented by Christopher Gist in 1750-51. A portion of this trail ran from the Licking River "to Maguck, an Indian settlement near present-day Circleville, by way of Hockhocking, near present-day Lancaster," which accords well with Atwater's and the Salisburys' descriptions of a portion of the route of the Great Hopewell Road. The fact that this network of paths extended to "Lower Shawnee Town, near present-day Portsmouth," and accepting that "such a set of trails could well have served the social, political, religious, and economic needs of the five major hypothetical Hopewell polities and their neighbors" (Greber 2006:103), supports Kennedy's (1994:54) proposed extension of the Great Hopewell Road with Ebenezer Zane's appropriation of at least a section of it for his road. As Greber (2006:103) acknowledged, however, "historic records cannot verify the existence of these trails eighteen or more centuries before Gist's journeys."

Lekson (2008:47), in his wonderfully iconoclastic overview of Southwestern archaeology, compared the ancient societies of the Southwest with the Hopewell culture, which constructed "perfect octagons, and squares covering many hectares" and built "cursuslike 'roads' running scores of kilometers." This statement implies an acceptance of the existence of the Great Hopewell Road, which is the only Hopewell "cursuslike" road for which evidence has been offered to support the claim that it extended for scores of kilometers.

Mark Sutton (2011:268), in an overview of North American archaeology, discussed the "long, parallel embankments called 'roads'" of the Hopewell culture. He observed that "only a few…are known"; and noted parenthetically that "some scholars discount" them (2011:268). As an example, he discussed "the Great Hopewell Road," which "extended several miles from the Newark mound complex in Ohio toward the nearly identical Chillicothe mound complex some fifty-five miles away" (2011:268). He added that "it is not clear whether the 'road' actually connected the two centers" (2011:268).

Helaine Silverman (2016:99), in an essay comparing the early Nazca site of Cahuachi with the Newark Earthworks, noted many similarities between these sites. She wrote that "Lepper presents a compelling case for a 'Great Hopewell Road' at Newark."

David Graeber and David Wengrow (2021:462) accepted that "there was clearly some kind of systemic co-ordination" between the various clusters of Hopewell earthworks, including Newark and Chillicothe. They also stated that there were "causeways joining them" (2021:462) but made no mention of the Great Hopewell Road in particular, though they reference my 1995 paper in a footnote.

Kevin Schwarz (2016) recognized that "the nebulous and, even to some archaeologists, hypothetical nature of the Great Hopewell Road (particularly south of Ramp Creek) has meant that it has been difficult to get traction on developing identification or research plans" (Schwarz 2016:31). As part of a Cultural Resource Management project, his work focused on a location along the proposed route of the Great Hopewell Road a short distance south of Ramp Creek. Within the projected corridor of the road, he identified a possible pavement that he described as "flecks of white decaying limestone … in a distinct lens" (Schwarz 2016:22). He eventually

concluded that "the Hopewell Road is worthy of further study and consideration as a potential cultural resource and more data collection [is] warranted to confirm or deny its existence at locations south of Ramp Creek" (Schwarz 2016:30).

Finally, an anonymous reviewer of the original version of this paper, Reviewer 2 as it happens, concluded that I presented no "convincing physical evidence that the road went all the way to Chillicothe" and declared that the Great Hopewell Road was like "other wildly popular ideas that won't go away—Sasquatch, Nessy, and Alien architects." While I concur with the reviewer's statement regarding the current lack of definitive "physical evidence" for a sixty-mile-long Great Hopewell Road, I strongly disagree with the implication that the whole idea should be made to "go away"—as if it were as implausible as imaginary monsters and ancient aliens.

American Sacrae Viae?

> The [Chacoan] roads … as spiritual pathways, could extend for miles to physical or abstract places. I believe roads were symbolic and metaphorical. … Roads acted as reminders of a common belief system that held Chaco culture together.
> Phillip Tuwaletstiwa (2015:xv)

> In their oral [traditions] Creeks were extensive travelers, not merely for trading purposes but also for ritual and natural pilgrimages. They traveled by boat in the Gulf of Mexico and took regular journeys north through the Mississippi Valley into the Midwest and Ohio regions.…The Creek oral history repeatedly mentions that the Creeks traditionally went north to special mounds for pilgrimages in spring and autumn.
> Jean Chaudburi and Joyotpaul Chaudburi (2001:6 and 9)

> [The Maya]…held Cozumel and the well at Chichen Itza in as great veneration as we do the pilgrimages of Jerusalem and Rome; and thus, they went to visit them and offer gifts, especially at Cozumel, as we do at holy places.
> Diego de Landa 1562, *Relación de las Cosas de Yucatan*

> There were rich, magnificent temples, and like sanctuaries that were widely venerated; people went to them on pilgrimage from every part of the Peru, much in the same way that Christians customarily visit the Holy Sepulcher of our Savior, the temple of the Apostles Saint Peter and Saint Paul, and the famous sanctuary of Santiago in Galicia.
> Bernabé Cobo 1653, *Historia del Nuevo Mundo*

The idea that the Great Hopewell Road might have been a formal pilgrimage route was suggested by research into other long, straight Indigenous American roads, from the roads of Chaco Canyon (Judge 1989; Marshall 1997) to the Mayan *sacbeob* (Friedel and Sabloff 1984); and from the documented pilgrimages undertaken by the Creek Indians (Chaudhuri and Chaudhuri 2001) and the Indigenous societies of Colombia (Helms 1979) and Peru (Bauer and Stanish 2001; Silverman 1994; 2016).

Lynott (2014:152) observed that "one of the corollary arguments Lepper has offered in association with the Great Hopewell Road is that the ceremonial landscapes being built at Chillicothe and Newark may have represented pilgrimage centers." He saw merit in this argument noting that "this model certainly helps explain where the labor needed to build these vast landscapes was derived. It also may explain how such vast quantities of exotic material that were fashioned into amazing ceremonial objects arrived in southern Ohio" (Lynott 2014:152).

Kennedy (1994:54-55) endorsed the interpretation that the Great Hopewell Road served as a path for pilgrims:

> Having discerned the regularity of the moon's passages, having built architecture to bring themselves into harmony with those passages, the Hopewell connected that architecture across vast stretches of terrain. The Great Hopewell Road did this for the average, literal minded, unenlightened pilgrim, while the more subtle connections were intellectual (1994:273).

Sutton (2001:268) concluded that, if the long, parallel-walled Hopewell "'roads' are real, their function is quite unclear" (2011:268). He suggested, however, that they might have been related to "world renewal rituals" or "pilgrimages of people to special places" (2011:268).

Nabokov (2006:40), while making no explicit mention of pilgrimage, suggested that the Great Hopewell Road might have been a pathway "for those 'performances of great magnitude' in which entire communities celebrated the demise of leaders, or the movements of celestial or cosmic forces, in order to secure fertility for their gardens" (2006:40). It is worth noting that these sorts of activities have clear parallels in Mesoamerican pilgrimages, which often involved participation in "fertility rites and the preservation of world order" (Palka 2014:57); and mimicked "the cyclical travels of astral bodies and spiritual essences" as they moved through the cosmos (Palka 2014:60).

Christopher Carr (2008a:631), while avoiding using the name "Great Hopewell Road," referred to the possibility of "the pilgrimage of Scioto-Paint Creek peoples to Newark along an embanked road" as one of multiple lines of evidence for "very strong social and ritual ties" between these two regions. Magli (2009:127) expressed support for the idea that the Great Hopewell Road was "built for ceremonial purposes" including its use as a "pilgrimage route." Martin Byers (2010:236) suggested that the Great Hopewell Road corresponded to what he called "the Newark-Chillicothe axis," which, in combination with his proposed Turner-Hopewell axis, "acted both to separate and link these two areas and their associated networks" of "Hopewellian cult sodality heterarchies."

Greber (2010:343), again without any mention of the Great Hopewell Road, described the Hopewell Mound Group as having "both a local side and a pilgrimage side. We do not know the home places of pilgrims; there were likely several such localities. Some visitors came from relatively nearby and others from medium to far distances." And whereas she withheld explicit support for the existence of the Great Hopewell Road, in her interview for the documentary "Searching for the Great Hopewell Road," she acknowledged that "Within the [Indigenous Hopewell] culture…If they decided to do that [build the Great Hopewell Road], they could have.

If they had a particular direction, they knew enough engineering, enough architecture, they knew enough science to be able to do that—if they wanted to" (Voyageur Media Group 1998).

Lekson (2016:112) compared "Hopewell's likely emphasis of pilgrimage" with "one popular genre of interpretation of Chaco" that portrays it as a pilgrimage center (e.g., Judge 1989). Lekson, however, disagreed with that interpretation for Chaco: "That kind of pilgrimage—thousands of people converging, Mecca-like, on a ritual center—is not something Pueblos do now or (as far as we can tell) ever did in the past" (Lekson 2018:45). And as for Chaco's long, straight roads, Lekson (2016:133) acknowledged they "surely conveyed pedestrian traffic,…[but] they also served, importantly, as markers of political/ritual affiliation, and of history—'roads through time' that connected great houses and sites of differing ages." He further suggested that "Hopewell roads may have carried similar symbolic loads" (2016:122)—a suggestion with which I am in full agreement. For Lekson, however, in spite of the many apparent similarities (2016:112-113), Chaco and Hopewell are quite different. Chaco was "a basic, garden variety Mesoamerican polity" (2016:121); "Hopewell, in contrast, really *is* weird" (2016:121). In a comparison of Hopewell to the Hohokam in the Southwest, Lekson described both cultures as "a supragovernmental or antigovernmental or instead-of-governmental cosmological arrangement that encompassed large areas and many people, and it got big things done without kings" (2008:23; see also Graeber and Wengrow 2021).

Timothy Pauketat (2013:87) has argued that pilgrimage played a key role in many ancient Indigenous societies, including the Hopewell culture. Without specifically mentioning the Great Hopewell Road, he stated that "the correspondence of landscape features and lunar standstills suggest religious movements within, around, and occasionally, between earthworks…" (2013:76). He also proposed that "the Hopewell heritage of the later people around Cahokia," including the deep knowledge of especially "the long cycle of the moon," were important to the rise of Cahokia (2013:188). Moreover, Pauketat believes religious pilgrimage was fundamental to that process: "Cahokia may well have become Cahokia, both the city and the trans-regional phenomenon, owing to the steadily growing numbers of pilgrims attracted to such a great cosmic entanglement" (2013:189).

Silverman (2016:99), who long has argued that the early Nazca site of Cahuachi was "a ceremonial and pilgrimage center," accepted that there was "a direct comparison with the Nazca in terms of the ritual movement that was being scripted by the architecture of Newark" (2016:103); and she agreed that "pilgrimage is what was directing the ancient Ohio people to and from Newark" (2016:103).

Graeber and Wengrow (2021:463) proposed that people "from hundreds of miles away" congregated at Hopewell earthworks "for rituals" (2021:463). But whereas gatherings of people from hundreds of miles away is consistent with pilgrimage, the rituals need not have been related directly to pilgrimages.

Joseph Gingerich (2023:26), in an overview of Ohio archaeology, mentioned the parallel walls that Squier and Davis claimed led from the Octagon Earthworks for "nearly two miles." Though he did not use the name "Great Hopewell Road," he expressed the view that such walls "were designed as paths for people" to walk through. And he affirmed that the idea that "people

could have visited these Hopewell monuments or places like Chillicothe, Ohio (the center of much Hopewell activity), as a form of pilgrimage, like a modern-day Mecca or Jerusalem is not, in my opinion, an exaggeration" (2023:27-28).

Finally, B. Jacob Skousen (2023:215) included a reference to the Great Hopewell Road as one of "numerous examples" of the importance of "sacred journeys—pilgrimages, power and vision quests, and processions" at pre-contact sites "in the Southwest, Midwest, and Southeast." He proposes that these journeys "were appeals to spiritual beings and powers that controlled the world, rebalanced the cosmos, and ensured fertility, abundance and renewal" (2023:228).

Archaeological Evidence for Pilgrimage

Joel Palka (2014:314) undertook comparative studies of "pilgrimage to ritual landscapes from the ethnographic record" in order to develop archaeological correlates of pilgrimage. He identified ten characteristics of pilgrimage that are associated with Maya pilgrimage as well as pilgrimage "in other culture areas" (2014:314).

First, shrines and temples are associated with "unusual or prominent geographical features" (2014:314). The Newark Earthworks were associated with a number of such geographical features, such as a glacial kettle lake that the earthworks partly enclosed (see Figures 1 and 2) and a large glacial kame visible in the lower left corner of the Salisbury map (Figure 1) on which they recorded several small burial mounds. In addition, the entire complex was almost entirely surrounded by three streams (Lepper 2004:76), and surrounding hilltops and valleys may have served as foresights or backsights for topographical alignments to pivotal solar and lunar rises and sets that were encoded into the earthworks (Hively and Horn 2013). Many of the earthworks in the Scioto Valley have similar geographical associations (Hively and Horn 2010).

Second, pilgrimage sites tend to be "separated from domestic contexts" (Palka 2014:314). Many of the Hopewell Ceremonial Earthworks have little evidence of intensive domestic occupations and the few documented examples of habitation sites in the vicinity of earthworks may be temporary housing for pilgrims (e.g., DeBoer 2010:197; Lepper 2006:128) or shrine buildings associated with clans or sodalities (e.g., Byers 2011:222).

Third, pilgrimage sites have "differing material remains compared to other religious contexts" (Palka 2014:314). Though I'm not entirely sure what is meant by the supposed contrast with "other religious contexts," examples Palka offers include concentrations of things such as ceramics, shells, human burials, shrines, altars, tombs, and "unique building configurations" (2014:314-315). All of these have been documented at Hopewell earthwork sites (e.g., Greber and Ruhl 1989; Lepper 2016), but none of these material remains necessarily relate to pilgrimage.

Fourth, pilgrimage sites often have features that facilitate "travel and access to shrines and movement in the ritual landscape" (Palka 2014:315). Most of the large Hopewell enclosures have areas suitable for boat landings as well as "ramps, roads…, walkways elaborate entrances,

special flooring, and paths" and "temporary housing" (Palka 2014:315). And, of course, the parallel-walled avenues that connected the various components of the Newark Earthworks (Figure 1) and other ceremonial centers, such as Portsmouth (Figure 3), channeled movement through these ritual landscapes.

Fifth, pilgrimage sites have "places for pilgrimage gatherings" (Palka 2014:315). The large and small earthen enclosures at Newark and other Hopewell sites could have accommodated pilgrimage gatherings of almost any size.

Sixth, pilgrimage sites have an archaeological record dominated by "diagnostic pilgrimage material culture, often in high concentrations" (Palka 2014:315). This category is similar to Palka's third class of material remains and the examples he offers can apply to either class. Examples of material remains that Palka (2014:315) considers to be "diagnostic pilgrimage material culture" that have been recovered from Hopewell earthworks include figurines ("images of gods/oracles/ancestors"), stones, shells, bones, potsherds, and other "ritual objects" (for Hopewell examples, see Greber and Ruhl 1989:208-210, 221-231; Lepper 2002:14-15; and Seeman 2004); but again, I fail to see the necessary connection to pilgrimage.

Seventh, pilgrimage sites have "material culture from different regions" (Palka 2014:315). One of the distinctive characteristics of the Hopewell culture is the far-flung "interaction sphere," reflected in the diversity of raw materials and finished ceremonial objects brought to the large earthworks from across much of the North American continent (Greber and Ruhl 1989:53, 80, 83; Lepper 2005:144-145; Seeman 2004). These regalia provide the best evidence for the offerings of pilgrims of any of Palka's proposed criteria.

Eighth, pilgrimage sites include evidence for "trade and exchange" (Palka 2014:315). The Hopewell Interaction Sphere almost certainly included items of trade and exchange, though I have interpreted the bulk of the objects crafted from raw materials from distant lands, particularly those materials that are represented in large quantities, as pilgrims' offerings (Lepper 2005, 2006).

Ninth, pilgrimage sites tend to exhibit "chronological depth" as reflected in "changing ceramic, lithic, and artifact styles" and "long sequences of absolute dates" (Palka 2014:315). The Hopewell culture is restricted to the four or five centuries between 100 BCE and 400 CE (Seeman and Nolan 2024), or 1 CE and 400 CE (United States of America 2023:124), which, in either case, is by no means an ephemeral period of time. There are, indeed, changing artifact styles over that period, such as the changes in copper earspool styles documented by Katherine Ruhl (1992), and the decline in the frequency of platform pipes over time. There are large numbers of pipes concentrated in offerings at the early Hopewell centers of Mound City and Tremper Mound, but they are few and far between at later sites. I am, however, not convinced that chronological depth can serve as a reliable indicator of pilgrimage, though it could provide evidence for the duration of time over which a pilgrimage center was active.

Tenth, pilgrimage sites have "evidence of the leaving or taking of objects at the shrine" (Palka 2014:315). There is considerable evidence for the leaving of objects as offerings buried in Hopewell mounds (e.g., Greber and Ruhl 1989:75-88; Minich 2004) as well as outside, but in

close proximity to, the ceremonial precincts (e.g., Blosser and Glotzhober 1995:back cover; Lepper 2002:back cover; 2004:78-79; Otto 2004:7). And I have proposed that Flint Ridge Flint bladelets and bifaces found in relatively small quantities at distant contemporary sites represent the taking away of gifts presented to pilgrims as tokens of the completion of their "hadj" (Lepper 2006:129).

Palka (2014:315) notes that "many of these traits, but perhaps not all, can be found at pilgrimage sites." As the above discussion makes clear, virtually all have been found at many, if not all, of the Hopewell earthworks. The extent to which each of Palka's traits reflects solely the material correlates of pilgrimage is open to question; and it seems certain that many could also be the result of other ceremonial or even secular practices (see also Silverman 1994).

The anonymous Reviewer 2 wonders why Newark, which supposedly has "no big deposits of exotica or regalia" could be considered to be "an important destination for pilgrims." Martin Byers (2011:284-285) also proposed that the Newark Earthworks were relatively impoverished in terms of big deposits of ceremonial regalia; and I provided a response to this presumption in my review of just what we know and don't know about the contents of the burial mounds encompassed by Newark's Cherry Valley Ellipse (see Lepper 2016).

The dozen or so mounds were, for the most part, simply obliterated without any sort of formal archaeological investigation. The Ohio Canal was excavated though one of the small mounds on the periphery of the enclosure and, according to a footnote in Squier and Davis (1848:72) it contained between 15 and 20 bushels of mica sheets. Almost nothing is known about what was in the large, central Cherry Valley Mound at the center of the Cherry Valley Ellipse, but there are fleeting references to copper artifacts, marine shell, and the remarkable stone carving of a human-bear composite being with a human head in its lap (Lepper 2016). Moreover, the Cherry Valley Mound was nearly as large as many of the large Hopewell mounds that yielded extraordinary quantities of regalia. For example, the Harness Mound at the Liberty Earthworks was 160 feet long, 90 feet wide, and between 13 and 20 feet high, whereas the Cherry Valley Mound was 140 feet long, 52 feet wide, and 15 feet high. The shape of the Cherry Valley Mound also is strikingly similar to the floor plan of the Harness Great House. It therefore should be clear to anyone that the relative lack of information about large quantities of regalia from the mounds at Newark can hardly be taken at face value as an indication of an absence of large quantities of ceremonial regalia at Newark.

Discussion

After conducting this review of the literature, it actually surprised me to learn that there appears to be a fairly general acceptance of the idea that there was a Hopewell road at Newark that extended beyond, and even well beyond, the two or so miles claimed by Squier and Davis in 1848. There is, however, no consensus as to whether that road extended as far as Chillicothe. Also, the sample of scholars who have expressed an opinion about the Great Hopewell Road is by no means a representative sample of the opinions of all professional archaeologists. Some who did not agree with my proposal might simply have chosen to ignore it rather than bother to dispute it. Nevertheless, the number of respected scholars who have offered some measure of support for the idea suggests it has merit. On the other hand, the fact that several authors chose to

avoid using the name "Great Hopewell Road," while expressing support for aspects of what the name was intended to convey, suggests some ambivalence about being perceived as whole-heartedly embracing the concept.

I strongly disagree with Prufer's (1996:23) assertion that there is "no concrete evidence whatsoever in support of such a line of communication." The similarities in geometrical forms of earthworks in Chillicothe and Newark (e.g., Hively and Horn 1982; Marshall 2012), the consistency in the astronomical alignments encoded in the earthworks in both regions (Hively and Horn 1982, 2010, 2016; Magli 2009), as well as the extent to which Flint Ridge Flint, quarried less than 16 kilometers from Newark, became a signature flint of the Hopewell culture (Lepper et al. 2001), presuppose such a line of communication. And the evidence provided by the Salisbury brothers and Warren Weiant, Jr., supports the proposition that this line of communication was formalized in a straight road framed by parallel earthen walls, similar to other Indigenous American cultural routes. Of course, Prufer (1996:24) was nearly as dismissive of the presence of "purposeful solar and lunar alignments" at the Hopewell earthworks as he was of the Great Hopewell Road; and these purposeful alignments are now widely accepted (e.g., Aveni 2004; Magli 2009).

The Great Hopewell Road was a ceremonial conduit between the Newark Earthworks and the Hopewell Core in the Scioto Valley (Lepper 2006; see also Lekson 2015). It also was an architectural affirmation of the Scioto Valley source of the ideas embodied in the design of the Newark Earthworks (Lepper 2002). The Newark Earthworks is the largest complex of geometric earthworks ever built by the Hopewell culture (or anyone else for that matter), but it's also something of a geographic outlier at the northern periphery of the classic Hopewell Core. This dichotomy suggests that the Great Hopewell Road also might have served as a kind of umbilical linking the Hopewell Core to this glorious outpost on the Hopewell frontier. William Folan (1991:224), in a review of Mayan *sacbeob*, wrote that such formal roads provided "a near-perfect element to any forest-bound communications network"; and the Hopewell were a forest-bound culture with a far-flung communications network.

The necessity for such a formal line of communication between these grandest expressions of Hopewell earthen architecture may have been due, at least in part, to the fact that they are located in separate river drainages. The core and cradle of the Hopewell culture was in the Scioto Valley (Greber 1989:64), which flows southward into the Ohio River; whereas the Newark Earthworks is located along Raccoon Creek, which flows eastward into the Licking River, which, in turn, flows eastward into the Muskingum River, which winds its way southeastward to the Ohio River. This would have made communication between the two centers via water a roundabout and time-consuming proposition. Moreover, as Kennedy (1994) first noted, the general path of the Great Hopewell Road was an important route of communication between the two regions for European American settler colonists by the 1790s and beyond (see also Greber 2006). This adaptive reuse establishes the enduring suitability of the projected route of the Great Hopewell Road as a thoroughfare connecting these two regions. Unfortunately, the repurposing of the road would have accelerated the degradation of the parallel earthen walls adding to the difficulty of identifying extant remnants (e.g., Park 1870). The repurposing of Indigenous roads is not unique to the Great Hopewell Road. For example, many Mayan *sacbeob* were repurposed as roads or railways (Shaw 2008:980).

The geographic advantages of the remarkably straight route of the Great Hopewell Road were made clear by two independent GIS analyses. It is a truism that the shortest distance between two points is a straight line; but, in practice, it depends somewhat on the topography over which that line is projected.

Jennifer Pederson (1999a, 1999b) examined the projected route of the Great Hopewell Road across a single USGS quadrangle map (Stoutsville) as a case study. She found that, at least in this limited area, the route corresponded to a remarkably linear geographic boundary between relatively flat, poorly drained soils to the west (Till Plains) and relatively rugged, well-drained soils to the east (Glaciated Appalachian Plateau). The mostly flat and dry ground would therefore have been an optimal route for pedestrian travel.

In a more intensive GIS study of the entire projected route of the Great Hopewell Road, Timothy Price (2004:58-59) demonstrated that the majority of a least-cost route between Newark and Chillicothe "falls withing a one-half mile buffer zone of the projected" route. Moreover, Price (2004:62) showed that "many portions [of the least-cost model] follow the projected route almost exactly" and concluded that this was "extremely significant."

Price (2004:47) also used data from the Ohio Archaeological Inventory to identify potential alternative destinations for the Great Hopewell Road. He examined the density of earthworks between Newark and Chillicothe and determined that, along the projected trajectory of the road, there were no targets of even remotely equivalent significance between the Newark Earthworks and the dense cluster of earthworks around Chillicothe (Price 2004:47). I think this is compelling evidence that the Great Hopewell Road was intended to link these two loci of extreme ceremonial activity.

None of this is to say that the evidence for the Great Hopewell Road is unequivocal; but many of the lingering criticisms of the idea of a Great Hopewell Road are based on misconceptions. For example, some scholars seem to accept as gospel Squier and Davis' implicit rejection of Atwater's (1820:17) claim that the road might have extended as far as thirty miles. There are, however, numerous problems with Squier and Davis' claim that the road only extended for, at most, two-and-a-half miles.

First of all, they made no attempt to address Atwater's claim that the road extended much farther than what they proposed. In their Preface they acknowledged Atwater's many important contributions as well as his "many errors," (Squier and Davis 1848:xxxiii). Yet, in their description of Newark, they make no mention of Atwater whatsoever and the only statements regarding the length of these parallel walls are a brief note on their map of the Newark Earthworks that states "Parallels 2½ miles long" (1848:Plate 25, facing p. 67; Figure 2); and the rather more vague and contradictory statement that they "have been traced for nearly two miles, and finally lose themselves in the plain" (1848:70), which suggests they may not have made a serious effort to assess the full extent of the road.

Second, their rendering of the parallel walls on their map is demonstrably inaccurate. They showed the parallel walls extending erratically more or less due south (1848:Plate 25,

facing p. 67; Figure 2); whereas, the much more accurate Salisbury map (Figure 1), corroborated by early 20th century aerial photography (e.g., Reeves 1936) and recent Google Earth imagery (Schwarz 2016:18), shows unequivocally that the walls extended in a remarkably straight line on an azimuth of approximately 211°. In addition, the Van Voorhis Walls (Ohio Archaeological Inventory site number 33LI0401), a surviving remnant of the Great Hopewell Road preserved in a wood lot north of Ramp Creek, is aligned on the same azimuth and not where it would be if the trajectory depicted by Squier and Davis' was at all accurate. Finally, Jamie Davis, an archaeologist with the Ohio Department of Transportation, has identified apparent remnants of the Great Hopewell Road as far south as eight miles south of the Octagon Earthworks. He has, so far, not formally published his imagery, but it is available on the 3D Archaeology Facebook page (Davis 2023).

In addition to overrating the work of Squier and Davis, possibly due to the cachet of publication by the esteemed Smithsonian Institution, some critics of the Great Hopewell Road hypothesis appear to underrate the unpublished work of the Salisburys and their claim to have traced the walls for at least six miles. But it was in no way the fault of the Salisburys that this important map and manuscript went unpublished. They dutifully submitted their manuscript to the American Antiquarian Society, the publisher of Atwater's work. Samuel Haven, the Secretary of the Society, sent the material to a review committee led by the distinguished historian Francis Parkman. Parkman and his committee unanimously recommended that the manuscript and map be published (Parkman 1870). Unfortunately, it appears that the Society's publication budget was insufficient for that year as well as for several subsequent years, and the manuscript eventually was shelved and forgotten.

In addition to the favorable peer review, the reliability of the Salisbury survey can be evaluated, in part, by considering aspects of their mapping that conflict with the work of other surveyors, but which subsequently have been independently verified. For example, Squier and Davis do not show outer walls encompassing the Octagon Earthworks or the Great Circle, whereas the Salisbury survey shows low embankments surrounding both of these earthworks (see Figure 1). The outer wall surrounding the Octagon Earthworks was confirmed independently by the survey of David Wyrick (1866), also a Newark resident, but Wyrick's map shows no corresponding wall around the Great Circle. Archaeological excavations in 1992, co-directed by DeeAnne Wymer and me, conclusively established the former presence of the outer wall around the Great Circle (Lepper 1998:126; see also Figure 4). That the Salisbury survey accurately documented significant components of the architecture that others missed or misrepresented, suggests that their testimony can be regarded as highly reliable. Therefore, I see absolutely no reason why the Salisburys' statement that they traced these parallel walls for at least six miles should not be accepted at face value; and that discussions of the extent of the Great Hopewell Road should begin there and seek to determine just how much farther it can be traced.

There also has been some disagreement with the interpretation of the Great Hopewell Road as a means for pilgrims to travel between the Scioto Valley and the Newark Earthworks. Robert Chapman, a discussant at the "Perspectives on Middle Woodland at the Millennium" conference, pointed out that "Mecca, for example, was a point of convergence for many roads

Figure 4. Photograph of the profile of a trench excavated in 1992 across the projected alignment of the polygonal outer wall surrounding Newark's Great Circle Earthwork that James and Charles Salisbury mapped in 1862. The Salisburys recorded that "outside, and entirely surrounding [the Great Circle] … at the distance of from 110 to 140 ft. is a low wall from one foot to eighteen inches in hight [sic] and about 20 ft. in width … It is somewhat singular that this exterior wall has never been noticed before—even the residents of the place seem to be ignorant of it.—yet it can be traced easily throughout its whole extent, except in one or two places on the south side where the field has been tilled a long time, and even here, when the ground is freshly ploughed, the color of the clay of which it is composed, plainly indicates its line" (Salisbury and Salisbury 1862:3). The profile of the trench, which was located along the northern perimeter of the earthwork, revealed three strata: the historic era plow zone, the remnants of the outer wall composed of yellow-brown clay loam mixed with abundant coarse gravel, and the buried A horizon upon which the outer wall, as well as the Great Circle itself (Lepper 1998:126), had been constructed. The Great Circle is visible in the background.

drawing pilgrims from all points of the compass," whereas the Great Hopewell Road was a single road connecting only two locations (Lepper 2006:131). This certainly is true, but my reference to Mecca was simply an analogy to a well-known pilgrimage tradition. In other cultures, there are pilgrimage roads that do lead from one sacred site to another, such as the Via Francigena, which went from Canterbury in England to Rome, and the Mayan *sacbe* that linked Yaxuná to Cobá over a distance of more than 100 kilometers in a predominantly straight line (Shaw 2008). Moreover, there is no reason to suppose that the Great Hopewell Road was the

only way in which pilgrims accessed the Newark Earthworks. They could have arrived from the west following Raccoon Creek or from the east following the Licking River and entered the complex along one of the two other parallel-walled roads leading into the Newark complex (Figure 1). It's also important to consider that there may have been a more extensive network of Hopewell roads linking the major earthworks, but which were largely obliterated subsequent to the arrival of Europeans (for examples, see Kennedy 1994 and Lepper 2006:132-133).

DeeAnne Wymer (2010:316) has objected to my use of analogies to rituals drawn from "historic indigenous populations, from Mesoamerica to the Ojibwa and the Southwest (and, indeed, from across the entire world)," which she suggested had been "'torn' from their cultural contexts" to provide support for some preferred "interpretation of the Hopewell world view." In my response (Lepper 2010b), I conceded that the use of simplistic anthropological analogies should, indeed, be avoided, but one of the points I was trying to make was that pilgrimage was not just a Muslim, Christian, or Buddhist religious practice: "pilgrimage is a global phenomenon found almost universally across cultures" (Reader 2015:1). As the epigraphs at the beginning of the American Sacra Viae section make clear, pilgrimages were practiced throughout the Americas and can therefore be presumed to have had a long history here. And comparing the archaeological correlates of pilgrimage proposed by Palka (2014) with the Hopewell archaeological record provides strong support for the idea that pilgrimage was integral to the Hopewell world view.

Archaeology is Hard

Schwarz (2016:31) considered the challenges associated with investigating the Great Hopewell Road and concluded that one of the foremost was simply how to deal with such a vast research corridor. Schwarz (2016:31) recognized that "the fragmented nature of the Section 106 process of the National Historic Preservation Act" means that "only isolated segments of the hypothesized prehistoric roadway" can be addressed; and then only "on a project-by-project basis." Many of these problems, such as dealing with dozens of separate landowners, are not unique to Section 106 projects. And, as Lekson (2015:122) observed, "it is expensive to research a 60 km long site that, more often than not, is invisible on the ground."

Schwarz (2016:31) also reflected on the problem of the erasure of evidence of such ephemeral features: "many mounds and earthworks are severely plow damaged, even to the point of becoming invisible to the naked eye at the surface, in some cases" (Schwarz 2016:31). This certainly is the case for much of the proposed extent of the Great Hopewell Road, which appears to have been constructed by removing the earth from the roadway and piling it up on either side to form the berms (Romain and Burks 2008). In 1870, Samuel Park (1870:41) attempted to trace the earthen walls as reported by Atwater, but he found that the land between Newark and Chillicothe already had been so "improved" by cultivation that he was unable to locate any traces of the walls. Therefore, plowing and possibly grading would have relatively rapidly pushed or dragged the earth from the walls back into the depression from which it had been removed. In this regard, however, Jamie Davis' (2023) work with Ohio's LiDAR database already has proven to be a successful strategy for identifying previously unnoticed possible road remnants.

Even if the Great Hopewell Road did not extend much beyond the six miles for which there is solid evidence, the implications of such a road for the social and religious lives of the Hopewell culture would by no means be diminished. As Shaw (2008:160) has observed, when a Maya *sacbeob* was intended to link two distant ceremonial centers, "the road need not have physically reached between the two sites." The fact that a road's trajectory pointed from one center to another "could have symbolized a real or desired link between" them (Shaw 2008:160). Similarly, many of the Ancestral Puebloan roads of Chaco Canyon "end—or rather are no longer visible—after only a few kilometers" (Lekson 2015:122). So, either, as with the Maya, the Hopewell sometimes considered it "sufficient to build a relatively short segment pointing in the proper direction," or gaps in the roads are a result of the erasure of the parallel walls through the erosion of these "fairly ephemeral features" (Lekson 2015:122). Therefore, whether the connections between ceremonial centers established by such roads were physical or symbolic, the implications were essentially the same. For as Greber noted, the ability of the Hopewell builders to have constructed a sixty-mile-long road is not in question: "If they decided to do that [build the Great Hopewell Road], they could have" (Voyageur Media Group 1998). Lekson (2015:125) noted that "there is nothing complicated" about projecting a long, straight road, even across many miles of highly irregular terrain. He suggested that "a troop of Boy (or Girl) Scouts could lay out [Chaco Canyon's] North Road with three bamboo poles, a spool of twine, and a box of truck flares" (Lekson 2015:125).

Finally, it's worth quoting here from Schwarz's recommendations for future investigations of the Great Hopewell Road:

> The key is for archaeologists to develop a clear understanding of what information we are searching for in the study of the Great Hopewell Road. How in the future will we judge and warrant data and findings in order to make interpretations, choose techniques to obtain these data, create the necessary regulatory and investigatory contexts, and develop ideas about what outcomes we are seeking? All of these involve reflection and strategic development (Schwarz 2016:31).

Hopewell Ceremonial Earthworks World Heritage Site

> Hopewell and Chaco are two of the most famous, most popular 'mysteries' of ancient North America. Hopewell's gigantic, enigmatic earthworks and Chaco's imposing great houses excite the public (and archaeological) imagination.
> Stephen Lekson (2016:112)

Seeman (2020:316) observed that "…UNESCO World Heritage status will enhance visitor expectations and outreach capabilities, at the same time potentially broadening the range of stakeholders wanting to tell the Hopewell story." Arguing that the stories we tell "cannot be boring, elitist, or overly speculative," he suggested that the Great Hopewell Road might have important lessons for how we can achieve these goals (Seeman 2020:316; see epigraph at the beginning of the paper). I think Lekson's (2016:112) quote regarding Hopewell and Chaco speaks directly to the questions Seeman poses.

My argument for a sixty-plus-mile-long Great Hopewell Road aligns with Lekson's (2008:13) proposition that "We should not limit Native history a priori. We should not say, 'They couldn't have done that.' Those limits, in both historical and archaeological thinking about Native Americans north of the Rio Grande, have unpleasant pedigrees." In the context of this paper, that means that it's way past time to give ancient Indigenous American societies the benefit of the doubt regarding their abilities to achieve extraordinary things. If the choice is to underestimate their achievements or overestimate them, I think we should try overestimating them for a change and see where that takes us (see also Lekson 2008:348).

This, I think, is part of the answer to Seeman's question as to how "to bottle" the extraordinariness that generated the public and media interest in the Great Hopewell Road. If you can legitimately argue that ancient Indigenous cultures achieved extraordinary things, then those things, whether they be monumental earthen enclosures, a nearly continent-spanning interaction sphere, or a Great Hopewell Road, then you have a spark that you can use to ignite the imaginations of the public and the media.

Of course, there are risks associated with celebrating the extraordinary. As Gerard Fowke recognized in 1888, "shrewd empirics" or "mistaken enthusiast[s]" can exploit the public's "love of the marvelous" (1888:403) to make people believe all sorts of nonsense. And, of course, the principal harm comes not so much from having to "hear the truth you've spoken twisted by knaves to make a trap for fools" (from Rudyard Kipling's poem 'If'), though that can be personally disheartening (e.g., Book of Mormon Evidence 2021), but rather from the fact that virtually all of these alternative views of the past promote the pernicious myth that Indigenous Americans were unable to do these extraordinary things.

The Hopewell Ceremonial Earthworks were inscribed on the UNESCO World Heritage List in 2023, and the Great Hopewell Road was mentioned in the nomination dossier:

> The long sets of parallel walls linking the geometric figures together were generally less than one meter high, and averaged 55 meters apart; they suggest processional rituals among the several parts of the complex. Small remnants of these walls remain near the southern edge of the Octagon. From that same location, another set of parallel walls once extended in a straight course to the south-southwest. Now known as the Great Hopewell Road, these lines were traced by surveyors in the nineteenth century for a distance of ten kilometers, and were visible for 27 kilometers in 1930 aerial reconnaissance. Their bearing is exactly towards the cluster of similar earthworks at modern Chillicothe, about 100 kilometers away" (United States of America 2022:139).

Now that the Hopewell Ceremonial Earthworks have been inscribed on the World Heritage List, it is even more important that we address the issues Seeman raised in regard to meeting enhanced visitor expectations and addressing the broadening range of stakeholders wanting to tell the Hopewell story. I think this involves not just ensuring that well-intentioned stakeholders have the means to share authentic Hopewell stories, but also increasing our efforts to call out and debunk false narratives that paint the Hopewell as something other than an Indigenous North American cultural collective. There have been useful contributions to this work

(e.g., Bolnick et al. 2011; Bush et al. 2022; Colavito 2020; Feder et al. 2011; Feder et al. 2016; Gill et al. 2021; Lepper et al. 2011), but it is a Sisyphean task.

Ultimately, the best way to overcome the Hydra of false narratives is to involve descendant Indigenous communities in the management and interpretation of the ancient Indigenous earthworks (e.g., Barnes and Lepper 2021). Mary Annette Pember (2018) has proposed that it has been the absence of Native Americans from the Ohio landscape, due to their brutal forced removal in the early 1800s, that created the vacuum, which charlatans have attempted to fill with Lost Tribes, giants, and even ancient aliens. Having Indigenous tribal members present at the earthworks to share their stories and their perspectives on the achievements of their ancestors can have a powerful emotional impact on visitors. I offer the following account of one such encounter as a coda.

In November of 2022, I gave a tour of the Great Circle and Octagon Earthworks to representatives of many tribes who were attending the annual Tribal Nations Conference sponsored by the Ohio History Connection and the Ohio Department of Transportation. After the formal tour of the Great Circle had ended, I was standing in the center of the vast circular enclosure talking with a small group of folks. Gradually, people wandered away from the group until there were just three of us: Eastern Shawnee tribal elder Brett Barnes, his wife Rhonda, and me. Brett was in considerable discomfort due to a back injury and was using an electric scooter to get around. At one point Rhonda drifted off and it was just Brett and I. Suddenly, Brett began to struggle to stand up saying he felt the need to say something. At first, I thought he wanted to say something to me, so I stood there waiting, but his words were not directed to me. He gazed intently at Eagle Mound in the center of the Great Circle and spoke quietly in the Shawnee language for a few moments. I felt he must have been praying and was embarrassed that I had not given him more privacy. But he explained that it wasn't a prayer. He was speaking to the ancestors. I asked if he could share what he had said. He replied that he told them that "We are still here."

Almost since the arrival of European Americans in the Raccoon Creek Valley the Newark Earthworks have been subjected to destruction and degradation. In 1848, the early archaeologists Ephraim Squier and Edwin Davis could write that portions of the earthworks "can now be traced only at intervals, among gardens and outhouses." Only the Great Circle and the Octagon Earthworks have survived mostly intact.

Local citizens saved the Great Circle by making it the county fairgrounds. They saved the Octagon by voting to increase their taxes to raise the money to purchase the property so that it could become the summer encampment of the Ohio State Militia. Only later was it turned into a golf course. Although these various alternative uses of the earthworks saved them from oblivion, they were nonetheless desecrations of sacred Indigenous architecture.

And yet, Barnes still could feel their spiritual power; he still could sense the immanence of the ancestors. And he felt compelled to speak to them. To tell them that, in spite of being forcibly removed from their Ohio homelands, in spite of the U.S. government's cruel attempts to suppress their language and culture, the Shawnee tribes remain vibrant and strong. They are still here.

In spite of misguided or malevolent efforts to rob American Indians of their heritage by attributing the grandeur of the Newark Earthworks to the Lost Tribes of Israel or mysterious Atlanteans, Barnes' simple declaration affirms that Indigenous American Indians conceived, designed, and built the Newark Earthworks as well as the other sites that comprise the Hopewell Ceremonial Earthworks.

And their descendants are still here.

For sites to be inscribed on the UNESCO World Heritage List they must have authenticity. Among the factors that are used to judge whether or not a site is authentic are the "spirit and feeling" of the place.

Barnes' testimony is a powerful demonstration of the authenticity of the Newark Earthworks. He was overcome by the spirit and feeling of the Great Circle and he wanted the ancestors to be reassured that, in spite of everything; "we are still here."

Conclusion

At the beginning of this paper, I posed four questions about the Great Hopewell Road proposal and here I will attempt to provide answers based on the data and arguments presented.

Is there any consensus that the road extended substantially beyond the "nearly two" (or "2 ½ miles")?

This is perhaps the easiest of the questions to answer. I believe there is a solid consensus that the Great Hopewell Road extended for at least six miles as established by James and Charles Salisbury in 1862,and this was recently corroborated by Davis (2023). This is important, because when I initially proposed the idea, many colleagues still accepted Squier and Davis' claim that the walls ended at Ramp Creek. Their claim was made in spite of Atwater's assertion that the walls might extend much farther, but the work of Squier and Davis was considered to be more authoritative. It also should be noted that the Salisbury brothers were quite clear that they had not traced the road to its end: "The extent of this great fortified high way; & what other ancient strong hold or place of importance it connects with, is as yet unknown—but its course if continued would lead near Circleville & Chillicothe, where are extensive ancient ruins" (Salisbury and Salisbury 1862:15). Some might consider that six miles is not "substantially beyond" the two-and-a-half miles proposed by Squier and Davis, but having overcome the not inconsiderable resistance to the idea that the walls extended beyond Ramp Creek, I think six miles counts as a good start.

Does anyone (other than me) think the road went all the way to Chillicothe?

Clearly, there are a few colleagues who agree that the Great Hopewell Road connected the Newark Earthworks with Chillicothe. There are rather more who are open to the possibility, but who do not accept that the available evidence conclusively demonstrates that the road

extended for the entire sixty miles. And there are other colleagues, such as Reviewer 2, who dismiss the proposition as pseudoscience.

I think the evidence and arguments presented make it clear that there was a formalized connection between Newark and Chillicothe. I agree, however, that there is, so far, no conclusive evidence for parallel earthen walls that extended for all sixty miles of the proposed route. An argument can be made to explain why there is no such evidence, but that would constitute a degree of special pleading that is inconsistent with a scientific approach to knowledge building. But the recent work of Davis (2023) demonstrates that potential road remnants still might be discovered beyond the Salisbury Limit, so the proposition is testable, which makes it a viable scientific hypothesis as Mark Lynott indicated. I offer here the following brief summary of the reasons why I remain convinced that the Great Hopewell Road is truly deserving of its sobriquet.

The Great Hopewell Road was a singular achievement—even if it was only six miles long. The Newark Earthworks was also a singular achievement. It was the largest connected series of geometric earthworks in the Hopewell world, and in spite of being at that world's northern periphery, it represents the grand synthesis of Hopewell architecture, geometry, and astronomy. All of its component parts are more or less modified versions of separate earthworks dispersed around Chillicothe (Figure 5), but none of the parallel-walled avenues associated with the earthworks of the Scioto and Paint Creek valleys approach anything like the length and straightness of the Great Hopewell Road.

The remarkably straight Great Hopewell Road points directly to Chillicothe. Hopewell architects were not usually obsessed with building straight roads, especially when those roads extended for any distance, such as those at Portsmouth (Figure 3). So, the Great Hopewell Road is exceptional.

The fact that the Great Hopewell Road follows an obsessively straight path pointing towards Chillicothe is significant. The architect of that road was making a clear statement. Follow this road and it will lead you to Chillicothe. Of course, Chillicothe was only sixty miles distant, so it is unlikely that any of the Indigenous residents of the region would have needed a road to find it, so there appears to have been something important about getting there, or getting from there to here, by following a straight path enclosed by earthen berms. We know that the road extended at least six miles; and based on the testimony of the Salisburys, we know it went even farther. We know that Hopewell travelers along that road would not have encountered any monumental earthworks until they arrived at the Scioto River (Price 2004). Therefore, the intended destination appears to be clear. The road was intended to link the earthworks at Newark with those in and around Chillicothe. We know the Hopewell were more than capable of building such a road. So why would they have stopped at six miles?

If all we had to go on was the Whittlesey, Squier and Davis map (Figure 2), which shows a not-so-great Hopewell road meandering generally southward and supposedly ending at Ramp Creek, no one would ever have suggested that it was anything remarkable. But thanks to James and Charles Salisbury, we have a much more complete understanding of the Newark Earthworks and the long, straight road that points in the precise direction, along a nearly optimal route, to the closest other center of monumental Hopewell earthwork construction (Figure 4). There is a

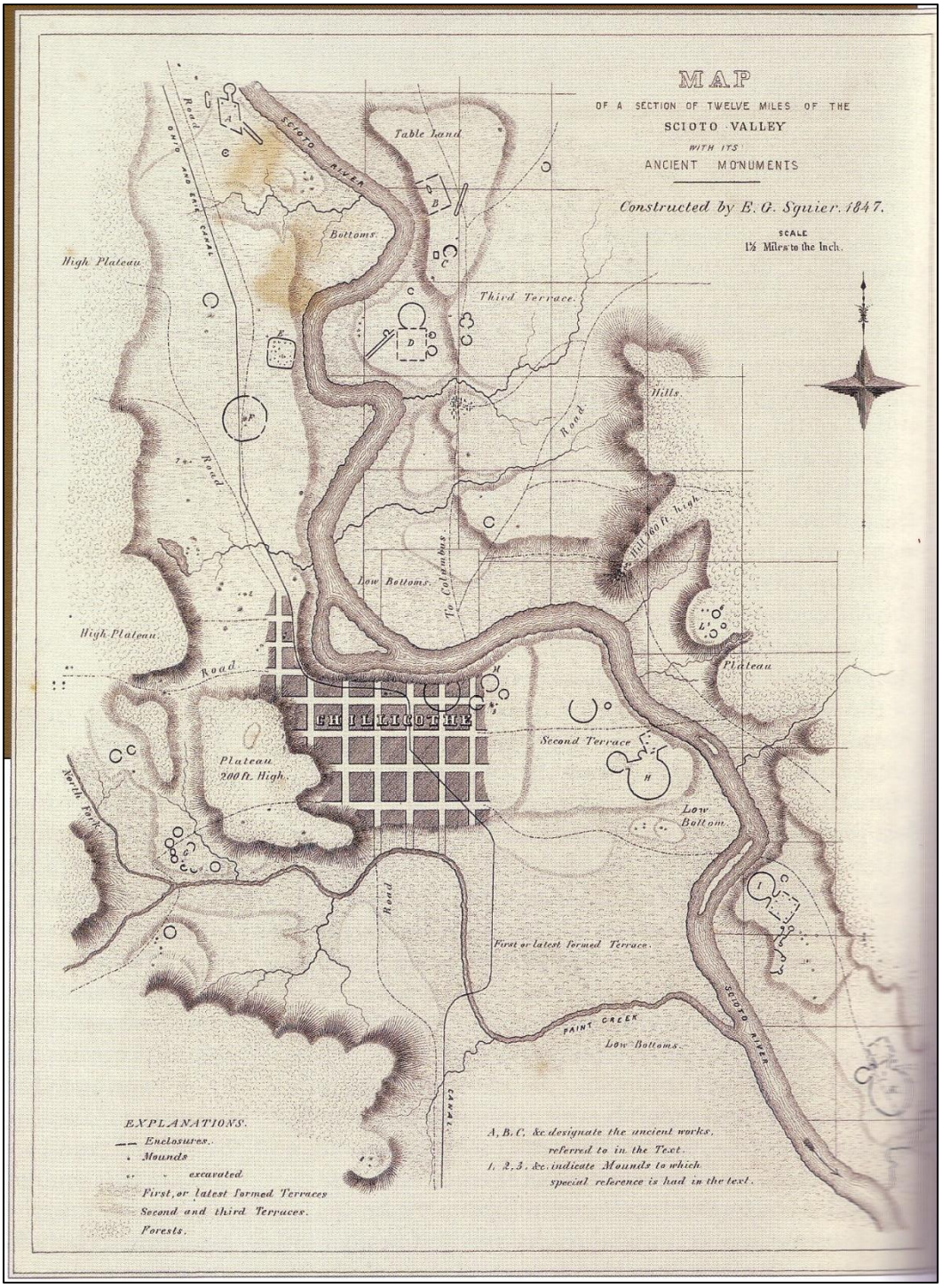

Figure 5. Map of the Scioto Valley north and south of Chillicothe as surveyed by Ephraim Squier in 1847. (Courtesy, Ohio History Connection**)**

profusion of earthworks around Chillicothe that encompassed what Greber (1989:64) regarded as the epicenter of the "explosion of the quality and quantity of expressions which define the florescence of the Hopewell culture." I am convinced that the precise alignment of the Great

Hopewell Road between Newark and the fountainhead of the knowledge that made the Newark Earthworks possible was intentional and not merely symbolic.

Does the interpretation of the road as a formal pilgrims' processional way make sense?

Based on my answer to the previous question combined with what we know about other North American long straight roads and what Indigenous people have had to say about them (see the various epigraphs under the American Sacra Viae section; and Lepper 2010a:118-119: 2010b), it seems clear (to me at least) that the interpretation of the Great Hopewell Road as a formal processional road to be used by pilgrims is, in the words of the comedian Robin Ince, "the least wrong version of events we have for the time being." I warmly welcome other potential explanations for its purpose.

Why has this long, linear earthwork resonated so powerfully with the public and media?

This question is, for me, the hardest to answer. In all my years of research and speaking to the public, no topic has captured their imaginations like the Great Hopewell Road. Maybe there is a bit of magic in the name, but there has to be more to it than that.

One reason might be that it brought something familiar to the heretofore enigmatic Hopewell earthworks. John Hancock is an architectural historian who became fascinated by the monumental constructions of the Hopewell. He recognized that the largest of the Hopewell earthworks, cannot "be grasped through direct experience as an architectural idea, as a monumental spatial experience, or as a meaningful compositional whole"; because they reflect "a spatial conception that is fundamentally beyond the grasp of the modern Western imagination" (Hancock 2004:259).

The Great Hopewell Road was—a road. People understand what a road is. This road, however, was ancient and Great. And it connected, in one way or another, the better known, but still inscrutable, earthworks of the Scioto Valley with the incredible grandeur of the Newark Earthworks. And, finally, it's important to remember that Newark's grandeur had not been conveyed effectively to a wide, general audience before my article in *Archaeology* magazine, in which I included a summary of Ray Hively's and Robert Horn's rediscoveries of the intricate geometry and precise astronomical alignments that the ancient Indigenous builders incorporated into their vast earthen architecture. I think that's part of why the Great Hopewell Road is so interesting. It makes Newark's grandeur even grander.

But whatever the reason for the fascination people have towards the idea of the Great Hopewell Road, I hope that some of that interest can be channeled into efforts to look for more evidence of road remnants beyond the Salisbury Limit; or to see if and how far the Portsmouth Hopewell roads can be followed. Maybe there's a manuscript in some archive out there describing the Portsmouth Earthworks equivalent to the almost forgotten Salisbury map and manuscript. Never assume we already know what's out there.

Acknowledgements

It's hard to know where to begin or end with acknowledging all the people who have helped in so many ways with the search for the Great Hopewell Road. I can't possibly thank everyone who deserves an acknowledgement, but here is my attempt to recognize as many as I can think of. I'm deeply saddened that some of the most important people aren't around to see their acknowledgement.

First and foremost, I thank Mark Seeman for asking why the Great Hopewell Road has so remarkably captured the imaginations of so many people. His query is why I became inspired to undertake this review and assessment.

Tom Law for his commitment to sharing the archaeology of Ohio with the world though his documentaries, especially *Searching for the Great Hopewell Road*, and our book, *Ohio Archaeology: an illustrated chronicle of Ohio's ancient American Indian cultures*.

Roger Kennedy for inspiring me to write that first paper for *Archaeology* magazine. I hope his proposed Chillicothe to Portsmouth Hopewell Road is eventually confirmed.

Jeff Gill for being there from the beginning and for his enduring friendship even after our memorable helicopter ride.

N'omi Greber for her unwavering support over the years, even though she found it tiresome to be asked over and over again what she thought about the Great Hopewell Road.

Peter Dunham for his gracious support of the possibility of a Great Hopewell Road from the very first time he heard about it.

Kent Reilly III for his support and encouragement of further investigations of the Great Hopewell Road.

Guilio Magli for his interest in Hopewell astronomy and his willingness to embrace the idea of the Great Hopewell Road.

Mary Borgia, a teacher in Newark who got her students inspired to try to get the Newark Earthworks recognized as Ohio's official State Prehistoric Monument. They succeeded, by the way.

Richard Shiels for his passionate support of the Newark Earthworks and for his efforts to organize and lead several group walks along the projected route of the Great Hopewell Road.

Brett Barnes and his wife Rhonda for granting me permission to share the story of Brett's experience at the Great Circle Earthworks.

The Ohio Archaeological Council for the 1993 grant to purchase infrared aerial imagery of the projected route of the Great Hopewell Road. This imagery is archived at the Ohio History Connection's Archaeology Collections Facility and is available for research.

And finally, I offer my sincere appreciation to the two anonymous reviewers for their sincere efforts to judge the merits of what must have seemed a rather self-indulgent exercise on my part. Certainly, they could not have been in any doubt as to the author of the paper. Their comments were extremely helpful in improving the clarity of my argument and in correcting a few errors that would have been embarrassing to see in print.

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