A new ordering of Adena tablets based on a deeper reading of the McKensie Tablet

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This essay was sparked by the recognition of previously unobserved avian heads on the McKensie Tablet. This led to the identification of both analogous and novel features on other engraved Adena tablets, which represent some of the most complex works of early-to-middle Woodland iconography. These observations reveal unsuspected links between tablets while documenting ways that influences might have flowed in the Adena world. They also provide a case study in how imagery can grow so allusive that it can embody, encrypt, and sustain a complex ideology—in this case, one that set the template for Woodland beliefs in the middle Ohio Valley until contact with Europeans.

1.1 Background

Engraved Adena tablets from Ohio, Kentucky, and West Virginia represent one of the smallest canons of elaborate Woodland period artifacts (fig. 1). With the exceptions of the Waverly-Hurst¹ (fig. 1L) and Cresap Mound tablets, which are made of siltstone, the Wright Tablet (fig. 1K), which is limestone, and a single clay specimen (fig. 1B), the rest of the seventeen or eighteen reported (but in some cases lost) postcard-sized inscribed slabs are (or were) made of fine-grained sandstones, such as Berea grit from Ohio (Dragoo 1989 [1963]:97). Leaving two tablets with animal contours aside (a turtle from Cresap Mound and a fragmentary rattlesnake from the North Fork of Paint Creek in Ohio), the other tablets bear curvilinear motifs on one or both faces, which usually incorporate a variety of visual puns and mirroring devices. These motifs combine references to human hands and faces with avian heads, wings, talons, and tails. Numerous observers have associated the avian elements with those of raptors and vultures (Webb and Baby 1957:101), in which case they have usually cited the turkey vulture, Cathartes aura (Merriam 1923; Romain 1991, 2009:61-64).

A number of interpretations (Romain 2009; Giles 2010; Carr 2011) appeared after this analysis was first formulated in 2008 and overlap, extend, or diverge from

its findings. Carr (2011:184–185) sees a Tree of Life motif in the Gaitskill Clay, Lakin A, Wilmington, Meigs, and Cincinnati tablets (fig. 1B–E, I). Romain argues that the Gaitskill Stone Tablet (fig. 1A) represents a salamander (2009:61–62) and sees human ears and feline imagery in the Cincinnati Tablet (ibid.:131–132). Giles thinks the same tablet represents an owl (2010:468–470), and all three observers have linked the engravings' mix of human and avian imagery to supernatural beings or bird impersonators (Carr 2011:184–185; Romain 2009:43–45, 133–136; Giles 2010:457–474).

The diversity of such readings, especially after we have added our own, is a reminder that we may all be partly or wholly wrong, no matter how reasoned and seductive our interpretations might be, as an Australian archaeologist learned about 90 percent of his identifications in a rock shelter upon meeting a knowledgeable Aborigine (Macintosh 1977). But the complementarity of many of the informed readings also suggests that genuine progress is being made in understanding the tablets' themes and structures, since all our efforts have established connections between multiple elements across a broad range of media. As we shall see, it is likely that several of the hypotheses even reinforce each other, since the tablets' makers obviously compressed multiple associations into extremely multivocal imagery.

Another trait the tablets share is that they were found in mounds, although only two—a turtle effigy (Dragoo 1989 [1963]:91) and the fragmentary Wright Tablet (fig. 1K; see Webb and Haag 1940)—were discovered during controlled excavations. Finally, their characteristic sizes, proportions, and often grooved backs suggest strong associations with a much larger corpus of grooved but otherwise undecorated tablets also discovered in tumuli (Dragoo 1989 [1963]:90, 98–101).

1.2 Dating

Methodical excavations of several earthworks, including Cresap Mound in West Virginia, have made it possible to define the evolution of such tablets from irregular examples to finely made ones, which only seem to have appeared in the late Adena (Dragoo 1989 [1963]:101). In the Toepfner Mound in Ohio, for example, crude examples were found in layers dating from 2780±410 to 2200±200 uncal BP (ibid.; Crane and

^{1.} The Waverly-Hurst Tablet is often referred to as the "Waverly Tablet." The two appellations will be used interchangeably in this article.



Figure 1. (A) Gaitskill Stone Tablet, (B) Gaitskill Clay Tablet, (C) Lakin A Tablet, (D) Wilmington Tablet, (E) Meigs County Tablet, (F) Low Tablet, (G) McKensie Tablet, (H) Bainbridge Tablet, (I) Cincinnati Tablet, (J) Berlin Tablet, (K) Wright Tablet, (L) Waverly-Hurst Tablet. These twelve Adena tablets and the Lakin B Tablet (fig. 6C) represent the core of the canon, because they are intact, elaborate, and related enough to offer insights concerning the significance even of three outliers, in which the symbolism has been reduced to concentric crescents or ovals (the Allen, Hale, and lost Grave Creek tablets). Three more tablets—the Cresap turtle, North Fork rattlesnake, and Kiefer specimen—have been excluded because they are too fragmentary or atypical to draw correspondences. The illustrations neither reflect the tablets' sizes nor their relative proportions: A-B, D-E, I-K, after Dragoo 1989 and Penney 1980 with corrections by the author. Illustrations C, F-H, L drawn by the author.

Griffin 1958:1119),2 while the irregular specimens in the Cresap Mound were found in the stratigraphically distinct lower zones, whose five radiocarbon assays averaged 2528 uncal BP.3 The finer examples in the same mound were all associated with a late "Robbin's Complex" stage in the upper zones, which was bracketed between 2200±150 uncal BP (Dragoo 1989) [1963]:291),⁴ and the disappearance of the Adena from the Ohio Valley around 100 A.D. (Clay 1992:77). Two radiocarbon assays have also been reported from the Wright Mound (Mainfort 1989:165; Giles 2010:456), which are 38 cal B.C. to 617 cal A.D. and 15 cal B.C. to 239 cal A.D. at two sigma (Rafferty 2005:158).

We agree with Giles (2010:456-457) that the zoomorphic tablets from Cresap and Hopewell Mound 1, where the turtle and rattlesnake, respectively, were found, may be among the most recent examples, and that "double-headed bird imagery on the Low, Meigs, and Wilmington tablets" overlaps "with symbols from Hopewell sites." In fact, we will argue that the most elaborate subrectangular tablets contain so many crosslinks that they were probably tightly grouped in time—in which case, they might all have been made between 200 B.C. and 200 A.D.

The association of the refined tablets with late Early Woodland to early Middle Woodland dates at the Wright and Cresap mounds raises the question of whether the artifacts can even be ascribed to a monolithic culture called "Adena," since many of the tablets were deposited when Adena and Hopewell not only overlapped in space and time but also used similar designs (Romain 2009:6). These overlaps even led Railey (1996:100) to argue that "Adena should be viewed as an early regional expression of Hopewell [in Kentucky] rather than as its predecessor." Although none of the engraved tablets have been found in eastcentral Indiana, McCord and Cochran (2008:359) went so far as to suggest that Adena and Hopewell "represent different aspects of a single ceremonial system" there. Clay (2005) went even further and recommended that the term "Adena" be dropped altogether, but we shall continue to use it with the proviso that the engraved tablets seem to have been largely employed during a

phase when much of their iconography may have been familiar to both Adena and Hopewell populations and that it influenced many Hopewell artifacts both at that time and later. An example of this carryover can be seen in the similarities between several tablets (fig. 1B, D-F) and certain artifacts from Mound City, which is indubitably Hopewell, including an embossed plate and three double-headed bird cutouts, since they all show paired avian heads at one or both ends (Romain 2009:63; Giles 2010:301, 404). Romain has even argued that many of the tablets (1991:41-48, 1992:31-36) and the plate (2009:95) share references to the same celestial alignments.

In addition to these authors, our provisos concerning the term "Adena" are based on the work of Greber (2005) and Rafferty (2005). Greber showed that "Adena" and "Hopewell" could still be applied on a regional scale such as the Scioto Valley, where a comparison of the type-sites revealed

a break . . . in four aspects of cultural activities: a basic change from a single group's use of vertical space to a multigroup use of a shared horizontal space for interments and other ceremonial/ritual/civic activities; a great increase in both the quantity and forms of artifacts produced in mica, copper, and marine materials; the addition of other exotic and local raw materials used for symbolic objects; and a significant increase in the size and complexity of archaeologically recoverable civic/ceremonial/ritual remains (Greber 2005:30).

Rafferty's comparison of Adena mounds reveals a "nuanced cultural landscape" (2005:167), not only in terms of local relationships between Hopewell and Adena but also within the "Adena" cultural web.

The West Virginia [Adena] mounds began with premound structures and were built accretionally. Burials were placed in pits. Adult males are predominant and were interred with a variety of grave goods. The Kentucky mounds may or may not cover several structures and were built in fewer but more intensive stages. Many individuals were placed in log-covered crypts. Both males and females are represented in the mounds, and grave inclusions emphasize bodily adornments. The Ohio sites apparently were not constructed over buildings and were built in complex sequences. Most interred individuals were adults who were placed in pits, and there were few grave inclusions (ibid.:165).

Rafferty concludes this list by noting that these samples reveal distinct Adena "dialects" while sharing the same "grammar" (ibid.). We will come back to these concepts when we try to establish connections between the more elaborate engraved tablets, since their distribution offers

^{2. 2029} cal B.C.-18 cal A.D. to 792 cal B.C.-210 cal A.D. at two sigma.

^{3.} One Cresap date, 2463-1740 cal B.C., is "too early and should be discounted" (Rafferty 2005:155). The other four are more consistent: 1004-180 cal B.C.; 406-93 cal B.C.; 406 cal B.C.-21 cal A.D.; and 201 cal B.C.-130 cal A.D. at two sigma.

^{4. 753} cal B.C.-80 cal A.D. at two sigma.

a way of analyzing ties between the compartments that have become the research units for archaeology in the central Ohio watershed.

1.3 Depositional contexts

One of the commonalities that crude and refined tablets found in controlled excavations shared was their close association with hearths rather than burials. Several unengraved examples were found in a fire pit at the base of the Florence Mound, while the most refined tablets at the Cresap Mound were thrown in a blaze at the summit (Dragoo 1989 [1963]:100). This suggests that some may have served in mortuary rituals rather than as grave goods (ibid.)—but it must be said that the Cincinnati Tablet (fig. 11) was reportedly found (before the birth of modern archaeology) under a skull (Clarke 1876:20). Many of the tablets were covered with red ochre or dark organic stains, indicating that they may have been used as printing blocks (Dragoo 1989 [1963]:99–100)—possibly for intaglio printing on leather (Penney 1980:17-20). This function may be related to the fact that a few decorated tablets, like the one from Cincinnati (fig. 11), and several undecorated ones have sharpening grooves; such tablets could have been used both for printing templates on skin and for sharpening the awls that made them permanent during ceremonies that combined tattooing and bloodletting (Webb and Baby 1957:97; Dragoo 1989 [1963]:96-99). Although no prehistoric mummies with tattoos have been reported from anywhere near the Ohio Valley, many natives encountered by early European observers—like the Mohawk-Iroquois chief painted by John Verelst in 1710 (Brasser 2009:68)—were heavily tattooed.

1.4 The Bainbridge and McKensie tablets

Two of these engraved artifacts, the Bainbridge Tablet (figs. 1H, 7A) and McKensie Tablet (figs. 1G, 2–5; 6B, 8–9), were first reported in Ohio Archaeologist in 1997 (Caldwell 1997). Although that article identified a few features on the tablets and some correspondences with their kin, it failed to detect most of the figurative elements in the McKensie Tablet—which was found in 1899 by D. T. Ryan in the McKensie Mound just south of Waverly, Ohio—making it difficult to understand where it stood in the canon. The description of the series of motifs that have now been identified on the quadriconcave artifact (which measures 9.5 x 7 x 1 cm) will lead to a meditation on the need to revisit even the

most familiar prehistoric images to look for elements that may have escaped earlier analyses.

The question that haunts this paper is simply, "How could I have been so blind?" How could I and a whole series of observers have failed to see these motifs, which are even more naturalistic than many found on other Adena tablets? The answer, as we will see, seems to be that the imagery was designed to be seen in stages. The most obvious elements have been arranged to trick observers into believing they have seen the whole picture, hiding foils that can only be perceived when the tablet is reoriented or turned into a negative impression. This strategy of hiding one image within another probably mirrors a layered cosmology or initiatory process that involved *phased recognitions*. These artifacts help reveal how this culture—one of the first in the Ohio watershed to domesticate plants, establish semipermanent settlements, and build large monumentsperceived the world as being spiritually ordered.

As this article unveils the newly discovered iconography, it will also show how it can be used to identify surprising features on other tablets. This will lead to a fuller understanding of the entire corpus of Adena tablets, with a number of hypotheses being made about how they can be read both graphically and thematically. Finally, these new criteria will be used to show how the tablets can be regrouped typologically.

2. Going beyond the previous decipherment

The first feature that jumped into focus upon re-examining the McKensie Tablet was a naturalistic avian head at its center (fig. 3A-B) that I had missed, despite having recognized other bird heads in corners A and B (fig. 2A) (Caldwell 1997). There are a number of differences between the central profile and the two in the corners. The head in corner B (fig. 4) has a pupil while the central one (fig. 3A-B) has an empty eye socket, as if it were a skull. The corner B head also has a longer beak, wider nostril, and hunched neck. Together, these suggest that the bird in that corner is a vulture while the central one with the stout beak and large eye is a hawk (rather than an eagle, whose eyes are smaller in relation to the head). Another apparent difference (at first glance) is that the central profile seems to be alone while the one in corner B faces another head in corner A (figs. 3D, 5B), whose domed cranium suggests a falcon or turkey. Given the fact that birds face one another at one end of the Wilmington and Meigs tablets (fig. 1D-E), the facing profiles in corners A and B of the McKensie Tablet were easy to spot.

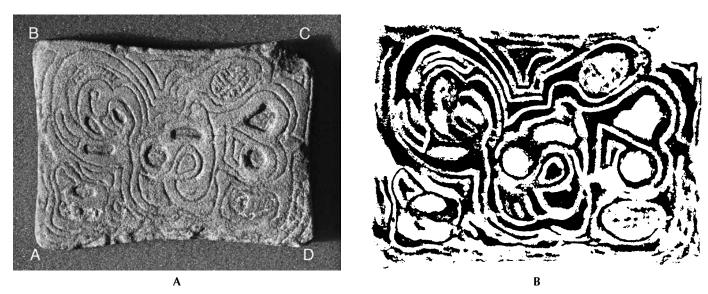


Figure 2. (A) The McKensie Tablet with letters referencing the corners. Photo: author. (B) A rubbing of the tablet, showing the image it would have created if it had been used as a printing block.

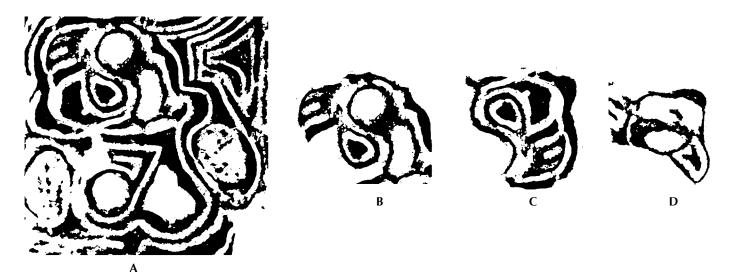


Figure 3. (A) The McKensie Tablet's body zone contains a "hawk" with oval "wings." (B) Detail showing the "hawk" head. (C) The second bird head shares its companion's beak, just reversing the hook. (D) The head in corner A of the tablet has a similar domed cranium.

But the assumption that the facing heads shared a common "body"—like those on the Wilmington and Meigs tablets (fig. 1D–E)—proved to be double-edged. Although it may have been partly correct, it also proved to be a distraction, leading me to expect lower body features like ribs, organs, wings, or feet in the central zone rather than more heads. This and other factors, which will be described, suggest that the McKensie

Tablet was designed like a magic trick, to distract viewers from anticipating the next step by playing upon false assumptions. Yet the assumption that the lines represented internal or external aspects of the torso and the recognition of the central head (fig. 3A-B) may be paradoxically compatible, since one being may contain another during gestation and digestion. Both processes recall myths where passage through a body represents

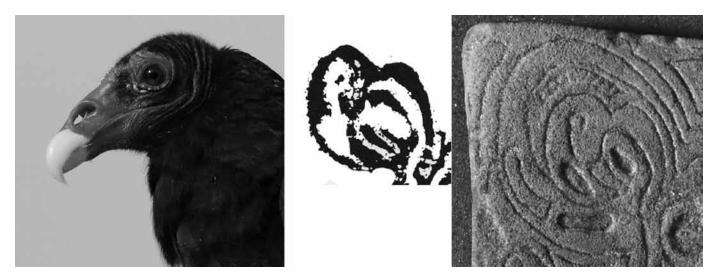


Figure 4. Like the turkey vulture, the small avian head in corner B of the McKensie Tablet has a broad nostril and an uninterrupted curve across the top of its beak and cranium. Photo of turkey vulture by Dori (dori@merr.info) via Creative Commons (cropped).

a supernatural transition. Mesoamerican sculptures of faces peering from jaguar mouths, for example, are often interpreted as illustrations of shamans taking on the embodiment of guide animals. Romain (2009:39-42) has even argued that the locally found Hopewell Wray figurine, which shows a human peering out of a bear neck, represents just such a transformation.

The belated recognition of the central "hawk" is ironic, since my 1997 article interpreted motifs in the center of both the Bainbridge (figs. 1H, 7A-B) and Cincinnati tablets (figs. 11, 7C)⁵ as schematized bird heads with eyes shown flounder-like on the same side of the head like those on the Wilmington, Meigs, Low, and Berlin tablets (fig. 1D-F, J). Once the central "hawk" (fig. 3B) came into focus on the McKensie Tablet, the two hatched ovals in corners C and D looked more than ever like wings, making the image a composite avian being with contrasting external heads, plus an internal head that contrasts with those in the corners. But even as the ovals resemble wings, they also look like seed heads. Although maize only arrived in the area around 200 A.D.—just after the Adena phenomenon vanishedand only became adapted to it seven centuries later, the tessellated motifs may allude to little barley, which was domesticated in the Mississippi watershed between 500 and 200 B.c. (Gibbon and Ames 1998:239). If the

patterns do refer to a crop that made population growth possible, then the tablet may be associated with planting and renewal.

But the discovery of the hawk is just the first recognition. Comparing the facing bird heads on the Wilmington, Meigs, and Low tablets (fig. 1D-F) with those in the McKensie Tablet's corners, we find that the latter are more asymmetrical. The vulture head in corner B (fig. 4) is tucked closer to the central "body" than the head in corner A (figs. 3D, 5B), making room for concentric lines around the cranium. An examination of the negative (in the form of a rubbing), which the tablet would have produced if it had been used for printing (fig. 2B), reveals that this apparent "aura" contains outlined, hatched, and even vacant segments. These details include a groove that turns into a beak's point and an eye between paired lines that suggest skin folds or plumage (fig. 8A). Taken together, the lines form a second vulture's head, which envelops the head identified earlier (fig. 4). The bigger vulture's eye is adjacent to the smaller bird's while its beak curves around the inner beak, transforming the composite image into a vulture surrounded by its own intimidating emanation (fig. 8B). But whereas the smaller head is clear when examining the tablet itself, the second only emerges clearly in the negative, making it likely that the heads were meant to be seen in separate phases.

The difference in scale between the meshed heads raises the question as to whether they are even the same species. This is intriguing because the Ohio Valley is

^{5.} Romain (2009:131-132) interprets the Cincinnati's central motifs as ears, a subject which will be discussed in Section 4.1.

home to two vultures—the one previous authors have cited, the turkey vulture, which scavenges dead animals and is timid, and the black vulture (Coragyps atratus), which is known to kill lambs, calves, and woodchucks (Zippay 2008). One of the clearest distinctions between the species is their nostrils. Turkey vultures have wide ones, like that of the inner bird (fig. 4), while black vultures have thin ones, like the slit on the outer bird's beak (fig. 8A). If these identifications are correct, then an aggressive black-headed species encompasses a timid redheaded one in a cowled double entity (fig. 8B) facing a falcon or turkey in corner A (fig. 5), which we suspect is a peregrine falcon, as that species has light and dark bars extending from its eyes and beaks.

The realization that the McKensie Tablet has a smaller head (fig. 4) embedded in a larger one (fig. 8B) led to the discovery of a similar composition in the top right compartment on the Waverly Tablet (fig. 1L), when the foot compartments are at bottom. Despite the fact that the Berlin, Wright, and Waverly tablets (fig. 1J-L) all have the same structure, with two iconographic compartments on each side of a horizontal bar, which links the compartments and their allusions to heads, talons, wings, and tails like a torso, the top right quadrants of the tablets are different. Where the Berlin and Wright tablets have easily identifiable avian heads, the Waverly Tablet only contains an eyed hook with a bifurcated tip surrounding an inner hook emanating from behind a cupule (figs. 1L, 11B). The discovery of the larger vulture head cloaking the smaller one on the McKensie Tablet (fig. 8B) makes it reasonable to interpret these two hooks as a schematized outer head with a parted beak surrounding an inner eyed and beaked head. This same motif seems to have been sketched in one of the lateral compartments of the Meigs Tablet (fig. 1E), where it appears under the head of the bird with a rayed eye, and the Low Tablet (fig. 1F), where it appears to the right of the upper face in our orientation. If the top right compartment of the Waverly Tablet illustrates meshed heads, then the Berlin, Wright, and Waverly tablets (fig. 1J-L) not only share structural similarities but also have references to avian heads in the same quadrants.

Both of the newly identified bird heads on the McKensie Tablet—the hawk in the "bowels" (fig. 3B) and the black vulture cloaking the turkey vulture in corner B (fig. 8B)—occur in zones that were previously regarded as being abstract. This makes one wonder whether other areas have been interpreted correctly or might contain more heads. One of the more obvious places to look for such imagery is another ostensibly abstract area, within the curve of the hawk's neck (fig. 3B), where





Figure 5. The head in corner A of the McKensie Tablet is distinguished from the head(s) in corner B by its domed cranium. Photo: author.

there is a strange "dewlap" or "wattle." We know from the heads in corners A (fig. 3D) and B (fig. 8B) that this tablet was meant to be seen from different perspectives. We also know that some imagery is clearer in the negative impression than on the tablet itself. Keeping these points in mind, if we turn the tablet or its rubbing 180 degrees, the hawk's "wattle" becomes part of yet another avian head, which shares its companion's beak, simply reversing the hook (fig. 3C). Its humped forehead resembles that of the "falcon/turkey" head in corner A (fig. 3D), differentiating the two from the vulture and hawk heads, which have those birds' unbroken curves up the length of the beak to the back of the cranium. So falcon/turkey heads seem to be represented both attached to and inside the common body.

These tentative identifications raise the issue of how the region's Woodland communities classified animals—a subject explored by Romain, who examined references to rosette spoonbills, shoveler ducks, eagles, and, of course, turkey vultures. He argued that paired cutouts of a carpsucker and corvid and a pipe showing a duck riding a catfish (2009:78-79, 154-155) "were intended as symbols of . . . interrelated and balanced realms—that is, the upperworld realm of birds and lowerworld realm of fishes" (ibid.:79). He also proposed that two copper cutouts from Mound City represent a breeding pair of falcons (ibid.:66-68). It is possible that the meshed turkey and black vultures in corner B (fig. 8B) represent another type of pairing, which was further associated both with the meshed hawk and turkey/falcon in the center (fig. 3A-C), and, by extension, with the comparable turkey/falcon in corner A (fig. 3D).

Although the facing bird heads on the Meigs Tablet (fig. 6A) are not nearly as different from one another

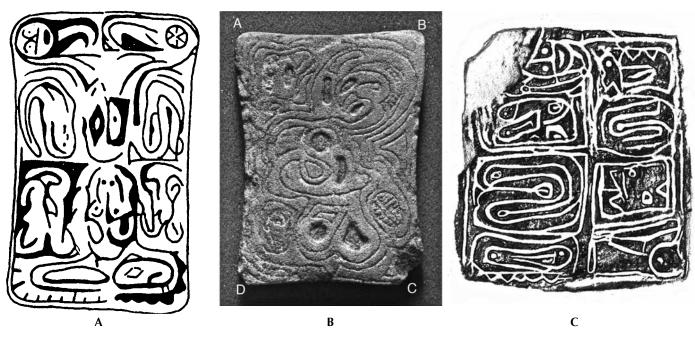


Figure 6. Both the Meigs (A) and McKensie (B) tablets seem to show different species of birds facing each other. The order of the compartments in the left column of the Lakin B Tablet (C) is partially inverted in the one to the right. Photo: author.

as those on the McKensie Tablet (fig. 6B), they are sufficiently distinct to think that they may also represent separate species. The left bird's beak is both thinner and more concave along the top than the one on the right. This raises the possibility that the left bird is a passenger pigeon, since such birds had globular heads and thin hooked beaks. The arrival of huge flocks of this meaty species in the spring may have been as significant as a weather phenomenon and was likely associated with plentitude and renewal.6 In New York, the Seneca celebrated the pigeons' arrival with the passenger pigeon dance. Two men with horn rattles sang to the bird while pairs of women fell between pairs of men, whereupon they would all stomp around the longhouse in double files (Fenton 1955:5). If this new identification is correct, then the facing bird on the Meigs Tablet, with its rayed "dead" eye, thicker beak, and contrasting color, may be a vulture, making this pair another set of complementary opposites. The Wilmington Tablet (fig. 1D) may also show two species, since the darker bird in the rubbing has a serrated neck while the lighter bird has a smooth one.

Another apparently abstract zone on the McKensie Tablet (fig. 2A–B) that calls for an explanation is the

circle and hook in the probable tail (fig. 9A). On other tablets, such motifs often seem to represent knuckles and claws (Webb and Haag 1940:124). If they represent a foot here, we should remember the ambiguity of the Gaitskill Clay Tablet's (fig. 1B) "wing" and "foot" compartments, where the being's appendages take on new meanings as the image is turned. When the avian heads on that tablet are upward (as opposed to downward, as in fig. 1B), the "wings" can be read either as eyed human hands with inward-turned thumbs (Penney 1980:13) or humanoid profiles with a small nose, two barbels dangling from their chins, and a crest composed of the former fingers. Turning the tablet on either of its longer sides transforms the "head/hand" along that edge into a bird head, with the two barbels becoming a hooked beak and the fingers becoming a falcon's eye stripes. The fact that each of the tablet's "wing" compartments has at least four readings (wing, hand, bird head, and humanoid profile with an avian crest) is an indication of how important it is to look for elaborate puns in all the engraved tablets.

The "foot" compartments of the Gaitskill Clay Tablet, which have the same circled dots, are probably just as complex as its "wings," since each one can be read when the tablet is positioned vertically, with the pair of schematized avian heads at the top, either as a foot with a footpad (or ball joint) or as an eyed head with

^{6.} One flock, which was at least 10 by 120 miles long, took two hours to pass overhead (Kennedy 1994:179).

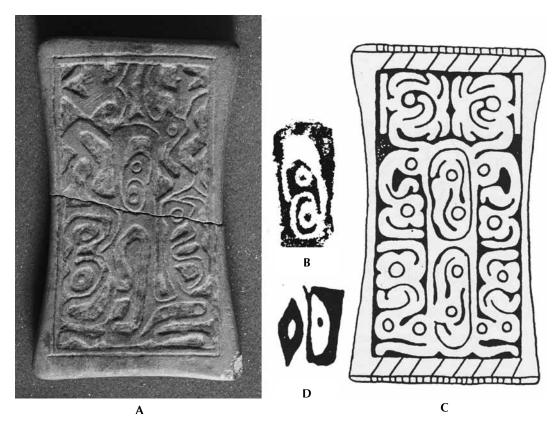


Figure 7. (A, left) The Bainbridge Tablet. Photo: author. (B, top center) Motif in the Bainbridge body bar resembling contrasting eyes with hooks. (C, right) The Cincinnati Tablet's body bar contains two eyed and hooked motifs resembling avian heads. (D, bottom center) Black vs. white eyes in the top half of the Meigs body bar (fig. 6A). The eyed cartouche in the Bainbridge Tablet (B) is similar to the proposed inner head in the top right of the Waverly-Hurst Tablet (fig. 1L, 11B) and the contrasting eyes in the Meigs body bar. Finally, the bottom right compartments of the Bainbridge and Cincinnati Tablets both rest on a loop containing two dots with an eyed "head" above. The meaning of these compartments is suggested by the Cincinnati example, which looks like a kneeling anthropomorph with one arm below its head and another arm or plume above.

a forward crest, open beak, and two dewlaps, and then, after turning it onto either of its longer sides, as another bird head with a curved beak. The same type of pun, in which a ball joint doubles as an eye, turns the circle-and-hook motif in the McKensie Tablet's tail zone (fig. 9A) from a reference to a foot into another beaked head, bringing the number of heads on the tablet to six.

Another clue that the "ball joint" in the McKensie "foot" or tail zone might double as an eye is that the circle duplicates the eye of the hawk (fig. 3A–B), with which it is perfectly aligned in its size, shape, and vacuity. Since only two celestial bodies, the sun and moon, are perceived by unaided vision as being orbs, the presence of two circles amid these heads may

underscore the Adena and Hopewell association of birds with the sky and its cyclical phenomena (Romain 1991, 1992, 2009:94-109; Caldwell 1997). But if this circleand-hook motif is a head as well as talons, it certainly is in a strange position, reduced to its abstract essentials and excreted, as it were, or carried like prey in the talons under the tail.

Finally, the entire tail can be read as yet another bird head (fig. 9B-C), maintaining the idea of heads folded into one another—almost like the motifs of an Escher print—in all three of the McKensie Tablet's sections. The mythogram becomes a reversible avian being, its tail doubling as a head. The structure of the reversible Low Tablet (fig. 1F), which has paired bird heads at both ends, vertically mirrored human faces between the

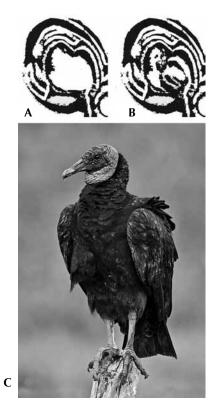


Figure 8. On the McKensie Tablet, a "larger-than-life" vulture head (A) cloaks an inner vulture's head (B). The turkey vulture (fig. 4) has broad nostrils like that on the inner vulture's beak, while the black vulture (C) has narrow nostrils like that on the outer beak, making this an image of two species. Photo by Alan and Elaine Wilson via Creative Commons.

avian heads, and two five-lobed (tail/foot) bars across the center, confirms that the recognition of internalized heads and reversible avian beings on the McKensie Tablet meshes perfectly with Adena iconography. A morbid-looking eyed and beaked head in the bottom right corner of the Meigs Tablet in fig. 6A, where it appears in one of two contrasting tail units, provides yet another point of comparison, proving that the Adena incorporated schematic heads into such positions. The similar eyed and hooked motifs in the tails of the Berlin Tablet (fig. 1J, top left) and Wright Tablet (fig. 1K, bottom right), which have the same kinds of scalloped feathers as the Meigs tail, are probably further allusions to avian heads, further reinforcing the interpretation of bird heads in the McKensie's tail zone.

So the tablet on which I previously detected only two avian heads may have as many as seven: three at the "head" end, two in the center, and two more where I had seen a tail. The discovery of these features in this tablet led me to ask whether other tablets contain similar elements. If they do, then we are likely to come closer to understanding the tablets' relationships with each other and the outlines of the beliefs they represented.

3. The myths behind the heads

Another issue raised by the inner, outer, and enfolded heads of the composite being on the McKensie Tablet is the possibility that they represent a mystical series. If the sequence of meshed heads—from the more figurative examples in corners A and B, to the slightly more schematic heads in the "bowels," to the completely schematic (one is tempted to say "digested") heads in the "tail"—does indeed represent such a series, then the imagery was probably meant to be recognized in stages, representing layers of religious experience. Our step-by-step recognitions, which only come after ridding ourselves of assumptions (for instance, that the lines around the smaller head in corner B were just an aura and that the "body" only contained abstract representations of internal organs), may mimic an initiatory sequence intended by the Adena religion.

If that is the case, the smaller vulture head might have stood out first (fig. 4); then, with a twist of perspective, the falcon/turkey head might have emerged (fig. 5), partly because its position and size echo the vulture. The being therefore became double-headed, increasing its strangeness and doubling its significance. Then, the "bowels hawk" (fig. 3A–B) might have become evident thanks to its prominent round eye—adding intimations of death, celestial spheres, nourishment, and the cycles associated with the digestive tract. Then, upon turning the tablet, perhaps the second central head representing a bird similar to that in corner A—appeared in the "body" (fig. 3C).

One suspects that the Adena may have been like many peoples in associating solar and lunar movements with passages through a cosmological digestive and reproductive cycle, and perhaps even with the birds they held sacred. If so, it would be logical for the carver of the McKensie Tablet to place avian heads in the zone where one might expect to find the tail and talons (fig. 9A-C). This visual pun could allude to excretion; the sight of raptors carrying prey in their claws; egg laying;⁷

^{7.} The central "body" bars of the Cincinnati (figs. 11, 13D) and Bainbridge tablets (figs. 1H, 7B) both contain round motifs with eyed

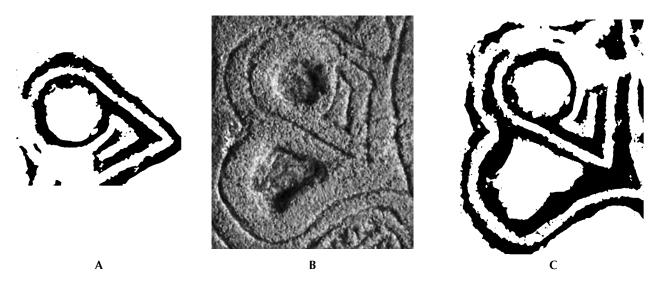


Figure 9. (A) The circle and hook in the McKensie "tail." While similar to hooked talons with basal bulbs on other artifacts, it could also be a pun on an eye and hooked beak. The entire "tail" represents yet another bird head (B-C).

and, by extension from these phenomena, to cycles of destruction and renewal.

Finally, the tablet's handlers may have returned to corner B, revealing the intimidating presence of a layered being composed of the inner and outer vultures (fig. 8B). The details of their myths have been lost, but enough hints about the stories' possible components and their relationships have survived to awe us all the same. Re-encountering the McKensie Tablet after so many years of false assumptions was a humbling reminder that almost nothing is gratuitous or merely decorative in any imagery derived from complex and impassioned beliefs. This reminds us that we must revisit, rethink, and tease apart almost any prehistoric image before we can begin to fathom its layers of meaning—keeping in mind, of course, that even our most educated guesses may be flawed and that we may never approach full understanding.

4.1 A new typological grouping of Adena tablets

The identification of unsuspected motifs on the McKensie Tablet sparked a search for comparable examples. This led to the discovery of many new attributes, which reopened the question of how the tablets are related. Up to this point such groupings have

and hooked references to bird heads, which may be references to such eggs and their internalized beings.

been based on a variety of factors: shared shapes; facing bird heads; opposing bird heads; a body bar; mirroring elements on opposites sides of the bar; horizontal vs. vertical composition; degree of linear incising as opposed to carved-out sections; a splayed or scalloped tail at the far end from paired avian heads; and the style of lines and motifs, including "the undulating contortions of the Cincinnati Tablet, the static monumentality of the Gaitskill Clay Tablet, and the dancelike agitation of the Lakin A Tablet"—characteristics that Penney attributed to regional styles (1980:26). The discovery of previously unobserved traits, however, suggests that the tablets have affinities based on additional factors such as

- 1. puns that turn half a tablet into a monstrous face (fig. 10B-D) when it is turned "upside-down" so that the avian heads are at the bottom (such images are similar to the Gaitskill Stone Tablet [fig. 1A], which has been considered atypical)
- 2. puns that turn a wing into a hand in one orientation and avian head in another (fig. 1B)
- 3. puns that turn feet into plumed and beaked heads (fig. 1B-C, I)
- 4. puns that turn wings and feet into halves of frontal human faces, which themselves double as laterally viewed bird heads (fig. 13B)
- 5. body bars and tails containing bird profiles, including the same schematics that formed the halffaces mentioned above (fig. 13)
- 6. large avian heads cloaking smaller ones (fig. 1G, L).

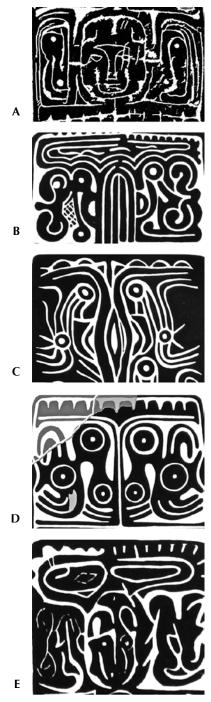


Figure 10. Masks and their lateral attributes. (A) The Low Tablet has two faces with bifurcated coifs alluding to beaks and talons. The masks in the same positions on the Wilmington (B), Lakin A (C), and Gaitskill Clay (D) tablets have prominent eyes, eyebrows or coifs, and nostrils. The lateral compartments on C and D form avian heads with open beaks. The face on the Meigs Tablet (E) has an upside-down, hooked and eyed bird head above it on the left.

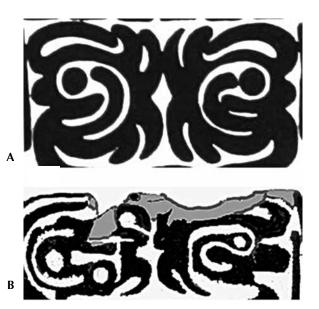


Figure 11. The Cincinnati mask (A) has graphic parallels with the Waverly Tablet's top compartments (B), which include a mask-like face lying on its side (B, left) and a large, slightly parted beak (B, right), which meets the face's hooked coif at the center. The bottom side of the face in this orientation reads as a peregrine head while the beak facing it on the right curves around a smaller hooked and eyed device, which probably represents another bird head. The Cincinnati mask is therefore an assemblage of allusions to a personage with two avian sides and an outer bird encompassing a smaller one, all transformed into a monstrous mask.

These criteria uncover new affinities between various tablets, resulting in the formation of nodes of affiliated tablets that closely align with Penney's groups (1980:24-26). Unlike his groups, however, which were largely based on geographical concentrations, quality of execution, and such stylistic qualities as "soft, fluctuating curves" versus "writhing, serpentine" ones, our nodes are based almost exclusively on symbolic criteria. These reveal unexpected connections to peripheral tablets—turning some into outliers, while others become bridges between nodes—indicating some of the directions that influences may have flowed and blended in the Adena world.

Node 1. The Gaitskill Clay Tablet (fig. 1B) and Lakin A Tablet (fig. 1C) share at least five similarities, two of which (4 and 5) may not have been reported before:

1. pairs of outward-facing avian heads at the traditional "tops" of the tablets, surmounting "frontally-posed, anthropomorphic figures with certain zoomorphic features" (Penney 1980:12)

- 2. wing elements forming hands (ibid.:13) that point upward when the avian heads are at the top
- 3. eight mirroring units including head and tail compartments
- 4. wing and foot elements that can also be read as heads with mouths, eyes, and curvilinear streamers, which may represent crests, plumes, coifs, and beaks (when the avian heads are at the top, the foot compartments, for example, have open beaks facing outward)8
- 5. large masks (fig. 10C-D) like the one on the Gaitskill Stone Tablet (fig. 1A) when the tablets are held "upside-down" so their paired bird heads are at the bottom.

Penney (1980:13) dismissed a reading of the Cincinnati's head zone (figs. 11, 11A), which deserves a second look in light of its similarity to these masks on the Gaitskill Clay Tablet (figs. 1B, 10D) and Lakin A Tablet (figs. 1C, 10C). He wrote that "The combined, symmetrical forms of the head area [of the Cincinnati Tablet, fig. 11A] are interpreted as a frontal face in which the negative elements include a grinning, toothy mouth, a small, diamond-shaped nose, and circular eyes with streamers" but that "there are some problems in this interpretation."

The recognition of these masks calls his hesitation into question, especially when one compares the Cincinnati head zone not so much with the Gaitskill and Lakin masks but with one that appears at the top of the Wilmington Tablet in our orientation (figs. 1D, 10B). The compartment on the right of this mask turns out to resemble both halves of the Cincinnati head (figs. 11, 11A), strengthening the argument that the Cincinnati mask is related to the masks and faces that appear on the Wilmington, Lakin A, Gaitskill Clay, and Meigs tablets (fig. 10B-E) when they are turned so that their references to paired bird heads are at the bottom (fig. 1B–E).

The face on the Meigs Tablet (figs. 10E, 12C), which confirms that the Adena placed masks and faces under the "tails" of their tablets, is split into dark and light sides with punctiform eyes, a mouth, and a bifurcated coif







Figure 12. Three masklike faces. (A) One of the two faces with a bifurcated coif on the Low Tablet. (B) The face with a split coif on the Waverly-Hurst Tablet. (C) A more schematized face on the Meigs County Tablet.

^{8.} Despite seeing the "displayed" hands, Penney failed to observe that the wings and feet also formed heads, writing: "Heads and faces are curiously absent" (1980:13). Romain (2009:133-136), for his part, recognized that the "bird feet" were "beginning to take on the attributes of human hands" but did not see that the feet also form three kinds of heads: one with two plumes at the top, when the tablets are in our orientation; another with three plumes at the top, in the opposite orientation; and a third, with curved avian beaks, when the tablets are on their sides.

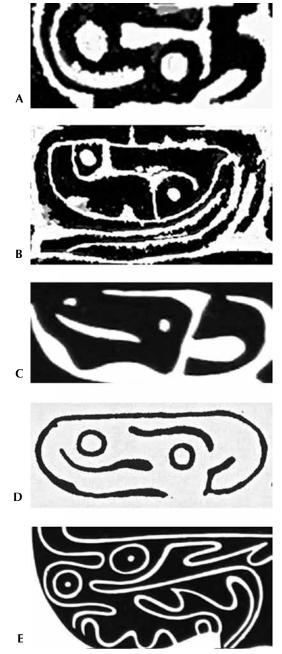


Figure 13. Half faces, wing-faces, and egg-shaped cartouches are almost interchangeable. (A) Half of the Waverly-Hurst face. (B) One of the supposed wing/foot compartments from the Low Tablet. (C) Half of the face/mask on the Meigs Tablet. (D) One of the two cartouches on the Cincinnati Tablet. It can be read as half of a face or as a beaked head shown from the side. (E) The Berlin Tablet's foot compartment is related to half-faces that double as beaked heads, since it has similar eyes and a talon/ beak. This compartment also includes its own lobed tail element and references to wings, making it a masterpiece of compression with a further resemblance to the masks in figs. 10B-D.

like the ones above the faces on the Low Tablet (figs. 1F, 12A). The splayed "tail" now mushrooms above the coif (fig. 10E) like a cloud split into radiant and dark halves, creating a being in precisely the same zone as the masks that appeared on the inverted Gaitskill Clay, Lakin A, and Wilmington tablets (fig. 10B–D).9

Three archaeologists seem to have come closer than Penney to seeing at least one of these grotesque masks, the one on the Cincinnati Tablet (fig. 11A): Willoughby (1936); Giles (2010:468-469), who thought it represented the face of an owl; and Romain (2009:131-132), who interpreted it as a feline head. In an aside, Romain also suggested that the patterns in the Cincinnati Tablet's (figs. 11, 13D) oval motifs, which we mentioned with regard to eggs, represent human ears. This is intriguing because the lateral compartments on the Gaitskill Clay Tablet (figs. 1B, 10D) and Lakin A Tablet (figs. 1C, 10C), which we interpreted earlier as both beaked heads and feet, can also be interpreted as their masks' ears, when the tablets' "tail bars" are at the top. Similar ears also seem to appear in the side compartments of the Wilmington mask in our orientation (figs. 1D, 10B). But the fact of the matter is that the patterns in the Cincinnati bar (figs. 11, 13D) are the same as the ones that make up each side of the Meigs face (fig. 13C).

But we are jumping ahead of ourselves. In the meantime, Giles's suggestion (2010:468-469) that the Cincinnati mask (fig. 11A) represents an owl is intriguing, since it relates to an apparent owl face in one of the Bainbridge Tablet's "foot" compartments (fig. 1H, upper left; see Caldwell 1997), and to Romain's interpretation of the Hopewell site serpent head as an assemblage including a puma and an owl head (2009:75–78). To this I would simply add that the owl in the serpent head is itself composed of two inwardly turned avian feet, whose talon bulbs become eyes. These realizations again show how premeditated the most elaborate Middle Woodland iconography is and how different readings of it are often complementary.

Willoughby's suggestion (1936:257-260) that the Cincinnati mask was related to the "Great Horned Serpent" is just as intriguing in light of the discovery of monstrous masks on the Lakin A, Gaitskill Stone and Clay, Wilmington (figs. 1A–D, 10B–D), and Berlin tablets (fig. 1J, when turned ninety degrees clockwise), as well as their links to faces in the same positions on the Meigs and Low tablets (figs. 10A and E, 12A, C). Given that

^{9.} A mask is also observable on the Berlin Tablet when it is turned ninety degrees clockwise from its conventional orientation.

the Hopewell snake head probably contains allusions to cats, owls, and raptors, it is even possible that Willoughby's proposal is compatible with Giles's feline and Romain's owl. Willoughby went on to speculate that the Cincinnati mask might be related to figures like Wathatotarho, an evil priest in Iroquoian mythology, whose hair was living vipers and hands and feet were huge turtle claws. As noted by Giles (2010:467),

Willoughby also pointed out that Virginia Algonquians had a priest [. . .] who "wore a headdress made of 'a dozen or sixteen' stuffed skins of serpents and several weasels' skins, their tails all tied together and the skins hanging about this head, back, and shoulders, and partly covering his face" (1936:260).

Having observed these masks, if we return to the Lakin A Tablet (fig. 1C) and flip its mask upside down, we find that the mirrored arcs at the other end (which look like the Low Tablet's split coifs [fig. 1F]) suddenly take on the appearance of a pair of eyebrows curving over oblique slits resembling shut eyes. The mask with alert pupils at the other end thus seems to have a dead or sleeping reflection! Another allusion to the mask on this tablet may be a serpentine "M" (in the opposite orientation from fig. 1C, where it appears as a "W" at bottom left) beside the arcs over the shut eyes. But if the "M" does refer to the mask, it has been reduced to its nose, eyebrows, and drooping sides.

Before leaving this node, we should mention that the two drop-shaped motifs in the bottom lobe of the Gaitskill Stone Tablet (fig. 1A), which was found with the equivalent clay tablet (fig. 1B), are identical in shape and arrangement to the four sets of bird eyes on the Low Tablet (fig. 1F), as opposed to the eyes of its human faces, giving the Gaitskill Stone Tablet previously unrecognized avian attributes. This observation is confirmed by the similarity of this set of drop-shaped motifs to eyes at the bottom of the tablet's companion, the Gaitskill Clay Tablet (fig. 1B), where they are side by side but belong to separate avian heads. The V-shaped split between the Janus heads on that artifact may even be echoed on the stone tablet by the "V" between the drop shapes. The further resemblance between the drop shapes in the Gaitskill Stone Tablet's "abdominal" lobe and the dark vs. light "eyes" in the Meigs (fig. 1E) and Bainbridge (fig. 1H) body bars supports the impression that the "abdomen" contains an avian entity in some state of internalization.

Romain has noted the similarity between the Gaitskill Stone Tablet (fig. 1A) and a "salamander" effigy from the Rutledge mound (Romain 2009:61-62, 122) and

suggested that the motifs that we interpreted as avian eyes resemble a small human face below a larger one (ibid.:125). The idea that they form such a face cannot be dismissed, as much evidence has been presented that the tablets represent bird-humans or bird impersonators (Carr 2011:184-185).

Node 2. The Meigs County Tablet (figs. 1E, 6A) and Wilmington Tablet (fig. 1D) share:

- 1. vertical compositions
- 2. central, longitudinal body bars
- 3. dark vs. light units in the heads and feet when used as printing blocks
- 4. splayed tails
- 5. anthropoid maskettes in facing avian heads at the ends opposite the splayed tails
- 6. variations in the bird heads and necks, possibly alluding to different species
- 7. beaks that double as beards for the maskettes, as opposed to the appendages of the maskettes in the Lakin tablets, which probably serve as both beaks and coifs.10

Regarding these maskettes, which link the tablets in Node 2 (fig. 1D–E) to the Lakin tablets, it should be noted that Romain (2009:133-136) commented on the resemblance between the Lakin A (fig. 1C) maskette, with its hooked "coif," and the beaked head on the Berlin Tablet (fig. 1J), when they are turned so that the "coif" and beak both curve downward to the right. He wondered whether the coifed Lakin A motif, which is detached from the rest of the design, represented a decapitated head. This is all the more intriguing because the Berlin head has the same type of crescent on either side of its eye-bar as ones which serves as anthropomorphic mouths in the maskettes of the Lakin A, Lakin B, Wilmington, and Meigs tablets (figs. 1C–E, 6C), suggesting that the Berlin Tablet's "bird" head also has a reversible human face, whose beak can be read both as beard and coif.

Several other tablets share some resemblances with those in Node 2. For example, the Low (fig. 1F) and McKensie (fig. 1G) tablets also have facing avian heads

^{10.} I would argue, unlike Penney (1980:15), that the coif on the maskette in the Lakin B Tablet (fig. 6C) probably formed a beak, like those in the Wilmington and Meigs tablets. Three subtle features support this conclusion: first, the maskette has the same kind of neck as the birds on the Meigs specimen; second, the broken zone corresponds to the length of a beak; third, a tiny section of the beak seems to have survived in the form of a two-millimeter incision between the maskette and beak.

at one or both ends, although the heads on the Low Tablet are upside down in relation to the center. Another similarity is that the McKensie, Meigs (figs. 1E, 6A), and Wilmington (fig. 1D) tablets all seem to show at least two species of birds, with a possible passenger pigeon facing a vulture on the Meigs example, a possible falcon facing both turkey and black vultures on the McKensie Tablet, and birds with serrated and smooth necks on the Wilmington Tablet.

The McKensie Tablet shares an affinity with the Meigs (figs. 1E, 6A, 10E) and Berlin (fig. 1J) tablets that is missing from the Wilmington (fig. 1D) specimennamely, a hooked and eyed schematic of an avian head in the tail zone. This is intriguing both because of the existence of heads in the previous node's lateral compartments and Giles's (2010:503) proposal that all four of the Low Tablet's side compartments contain stylized human faces embedded in wings. If we take these suggestions that the Adena often placed references to heads and faces in places other than obvious head zones (where one often finds paired bird heads) a step further, then we are ready for the next revelation, for it turns out that Giles was onto something: heads are present, but each one is only half of a frontally viewed human face (fig. 13B).

The top left and bottom right compartments beside the faces of the Low Tablet are clearly related to the Waverly and Meigs faces once the latter are split down the middle (fig. 13A-C). Furthermore, these half-faces are the same devices as the central cartouches on the Cincinnati Tablet (fig. 13D) that Romain interpreted as ears. The half-faces on these four tablets can also be read as bird heads when they are laid with the hook curving downward (as in fig. 13A). The "arms" (and thighs) on the Gaitskill Clay Tablet, between the median line and hands, are also a close approximation of these half-faces (figs. 1B, 10D), with dots that match their mouths and eyes (although the "arms," at least, look like spoonbill silhouettes as well). If this reading is correct, the Gaitskill Clay Tablet not only has a "mask" below the "tail/eyebrow" bar but also a split anthropoid face with avian allusions between the hands. Finally, the Waverly, Meigs, Low, and Cincinnati half-faces also resemble a head at the bottom left of the Berlin Tablet, which has two "eyes" and an elaborate beak/talon (figs. 1J, 13E).

The Bainbridge (figs. 1H, 7A) and Cincinnati (figs. 1I, 7C) tablets lie between Nodes 2 and 3. Their affinities with Node 2 include longitudinal body bars and a specific resemblance with the Meigs specimen, whose bar, like theirs, contain contrasting eyes and one or more hooks.

Node 3. The Berlin Tablet (fig. 1J) and Wright fragment (fig. 1K) share:

- horizontal composition
- 2. central, latitudinal body bars
- 3. four peripheral compartments
- 4. an avian head facing outward
- 5. a schematic eyed and hooked head in a lobed wing or tail unit.

Although the Waverly-Hurst specimen (figs. 1L, 11B) shares some of these commonalities, its allusions to avian heads, as we saw in reference to the McKensie Tablet, are turned inward rather than outward in the top right corner, where a large head seems to cloak a smaller schematic one. This distinction turns out to be one of the particularities that make the Waverly Tablet a bridge to other tablets and a key for understanding their unifying themes. Its bottom two compartments, for example, show talons clutching the same trilobed motif containing a cup mark as those seen in all four compartments below the Cincinnati "mask" (figs. 11, 7C). Although the Cincinnati's eyed "clover leaves" correspond to the basal bulb on talons found on other Middle Woodland artifacts (Romain 2009:97-98), their position and structure are so reminiscent of the plumed heads with open beaks in the equivalent compartments on the Gaitskill Clay (fig. 1B) and Lakin A (fig. 1C) tablets that one can assume that the cloverleaf motifs in the Cincinnati and Waverly (figs. 11, 1L, 7C) tablets are schematic heads as well. A comparison of the Cincinnati's bottom right compartment, which contains one of these eyed "heads" between appendages, with the motif in the same position on the Bainbridge Tablet (fig. 7A, C) confirms this, since both motifs have an "eyed head" and "bodies," which rise from a loop containing two dots, making them look like kneeling anthropomorphs. If this is correct, the Cincinnati Tablet has four anthropomorphs, each of whom is raising an arm or wearing a plume that meets the other anthropomorphs' arms or plumes across the tablet's "waist."11

Returning to the Waverly Tablet (fig. 1L), the top left compartment, which corresponds to the bird's tail/ wings in the structurally similar Berlin specimen (fig. 1J), includes a frontal face lying on its side with its chin turned left, mouth and eyes formed by cupules, and a

^{11.} In keeping with the Adena tablets' polysemic nature, Romain (2009:131–132) concluded his reading of the Cincinnati Tablet as illustrating a puma-shaman by interpreting the same trilobed motifs as feline footpads between claws.

split coif facing right (figs. 11B, 12B). This face strongly resembles the face with the same coif that appears in the Meigs body bar (fig. 12C) when its avian heads are at the bottom and the two faces with bifurcated coifs in the body zones of the Low Tablet (fig. 12A). If one divides the Waverly face along the nose (as we saw above, when considering Node 2), each side is an avian head in profile with a beak formed by one of the coif's hooks (fig. 13A).

This reading of the bilobed coif as forming two beaks is confirmed by the fact that all the human maskettes have either hooks resembling beards (Wilmington Tablet, fig. 1D; Meigs Tablet, figs. 1E, 6A) or coifs that double as beaks or allude to them (Lakin A, fig. 1C; Lakin B, fig. 6C). This identification of coif/beard hooks with beaked heads is again confirmed by the two arcs at the bottom of the Lakin A Tablet in our orientation, since they are in the same position as the avian heads on the Gaitskill Clay Tablet (fig. 1B).

With regard to the faces with split coifs that appear in the body zones of the Low Tablet (fig. 12A), upper left compartment of the Waverly Tablet (figs. 11B, 12B), and body bar of the Meigs Tablet (fig. 12C), it is interesting to note their similarity to the head of the human effigy pipe from the Adena Mound (Ohio Historical Society, Columbus, cat. no. 32; see Townsend 2004:31, fig. 41A–B). The statuette has the same coif as the faces, including the one on the Waverly Tablet (fig. 12B), where the hook closest to the center mirrors the curve of the beak in the compartment to the right, proving that they were meant to be associated with one another. The coif on the pipe's head is therefore an allusion to the same double-headed avian being alluded to by the halves of the "human" faces on the tablets (fig. 13) and even more explicitly in the paired arcs (Lakin A, fig. 1C) and bird heads (Gaitskill Clay, Wilmington, Meigs, Low: fig. 1B, D-F) at the ends of some tablets.

Giles (2010:459) thinks the hooks on the Adena pipe's head resemble the eye stripes on Hopewell falcon effigies and goes on to argue that

the parallel motifs on the heads of these "human" figures on the Gaitskill Clay and Lankin [sic] A Tablets are analogous to the eye stripes on the Adena pipe and Hopewell falcon effigies. . . . Further, the vertical positioning of the Adena pipe's legs appears to be analogous to the position assumed by the figures' legs depicted on the Gaitskill Clay and Lankin [sic] A Tablets, suggesting their common derivation. . . . The position of these figures' legs also suggests a partial morphological transformation of these ritual actors' lower limbs into those of a perched bird . . . , since they portray a bent position that is impossible for the

human leg to physically assume. Due to these shared motifs, I argue that these figures depict a single or analogous set of mythic characters that became important during the Early to Middle Woodland period in the Central Ohio River Valley (Giles 2010:460-461).

Although Giles's hypothesis is intriguing, the consistent association of bifurcated coifs on Adena tablets with beaks (fig. 13), rather than eye stripes, suggests that the hooks on the Adena pipe primarily allude to bird mouths. But Giles's idea is still worth considering, because there may be a carryover between the Adena beak-coifs—which turn each half of the Meigs and Waverly faces into an avian profile (fig. 13A, C)—and stripes on falcons. This is all the more likely because the "half-face" birds on those tablets have an eye stripe leading to the mouth hole. If these falcons are like the Adena pipe, they are wearing their own coifs, as it were, in a further reference to their own beaks, talons, and ferocity.

The Adena pipe's feather bustle, which mimics a bird's tail (Romain 2009:47–51, 73–75), underscores the pipe's resemblance to the tablets, which combine avian and anthropomorphic iconography and often have scalloped or serrated tail units. While we are on the subject of such appendages, it is worth noting that Giles (2010:503) reads the four rectangles that meet across the center of the Low Tablet (fig. 1F), which have five lobes each, as avian feet or tail feathers, but states that they are "numerically significant, because human beings have five fingers/toes." Although none of the equivalent tail bars (at the opposite ends from allusions to avian heads) on the Gaitskill Clay, Lakin A, Wilmington, and Meigs tablets (fig. 1B-E), has five or ten lobes, the suggestion is still worth considering, because the maker of the Low Tablet may have indeed compensated for the absence of references to fingers and toes (which appear, for instance, on the Gaitskill Clay [fig. 1B] and Lakin A [fig. 1C] tablets) by adding them to the bars.

Another motif on the Adena pipe that recalls the tablets is the coiled and hooked pattern on the front of its loincloth, which Romain (2009:73-75) interpreted as a snake. While the motif over the figure's belly (and its coiled intestines) resembles the avian heads at the ends of the Low Tablet (fig. 1F), it seems more closely related to the schematized avian head in the Meigs tail (figs. 1E, 6A) and the hooked patterns in its "wing" compartments. One of these, under the white bird head with the rayed eye (fig. 6A), is a sketch of the same motif—consisting of an outer hook with a bifurcated tip around an eyed and hooked pattern—that we encountered in the Waverly's top right compartment (fig. 11B), where we interpreted it

as one bird head encompassing another. Such similarities suggest that the pipe contains more allusions to avian beings and flight than have been recognized.

If one merges these insights concerning the face composed of two avian heads in the Waverly Tablet's top left compartment with those concerning the inner and outer avian heads in its right compartment, along with Penney's realization that the latter resembles each side of the Cincinnati mask (figs. 7C, 11A), then one is ready for the final surprise that the Waverly Tablet holds in store for us—a surprise that Penney missed because he did not realize that the Adena embedded allusions to heads within other structures, especially other heads. Penney writes that

the motif in the upper right [of the Waverly Tablet] . . . duplicates one of the paired, polylobed head motifs [of the Cincinnati Tablet], including the circular eye with streamers. In the Waverly Tablet, the polylobed motif is paired with a relatively humanistic, polylobed face with circular eyes, a long, cylindrical nose descending between the eyes, and a circular mouth. Since the polylobed motif appears in the Waverly Tablet only once, the interpretation of the paired motif in the Cincinnati Tablet as a single, whole face is debatable. The substitution of a naturalistic face for a polylobed motif in the Waverly Tablet, however, tends to affirm the polylobed motif as some sort of head form (Penney 1980:14-15).

Despite the fact that Penney only found one equivalent of the Cincinnati mask's two "polylobed" halves (fig. 11A) on the Waverly Tablet, he uses the word "polylobed" for both of the Waverly's top compartments (fig. 11B), showing that his mind came extremely close to seeing the whole image, with its fusion first of avian heads into a humanoid face on the left, and inner and outer bird heads on the right, and then further fusion of these foils (or complements) into the grotesque mask, which finds its clearest expression across the top of the Cincinnati Tablet.

What Penney didn't see was that the two halves of the Cincinnati head zone (fig. 11A) blend aspects of the top compartments of the Waverly Tablet (fig. 11B). For example, the former's fanned streamers, which meet in the center, reflect the Waverly's face's bifurcated coif, and the paired barbules dipping toward the body bar of the Cincinnati Tablet copy the parted tips of the vulture's beak in the same position on the Waverly specimen. Consequently, each half of the Cincinnati head zone is a compilation of puns on avian and human heads, whose final emanation is the masklike face formed by the fusion of the two sides. While Penney found interpretations of the Cincinnati head zone as a single face "debatable,"

the single face motif finds validation in its resemblance to the newly recognized masks that appear when one inverts the Wilmington (figs. 1D, 10B) and other tablets; the similar positions of faces on the Meigs (figs. 1E, 10E) and Low (figs. 1F, 10A) tablets; and, finally, the fact that the "single, whole" faces on the Waverly, Low, and Meigs (fig. 13A–C) tablets are themselves composed of two top-to-top bird profiles, which meet along the faces' noses. Once again, Penney almost saw some of these details, since he recognized the similarities between the Waverly face and the most mask-like of all the tablets, the Gaitskill Stone Tablet (fig. 1A; see Penney 1980:16), which provided the key to our discovery of masks in the inverted Gaitskill Clay (figs. 1B, 10D) and Lakin A (figs. 1C, 10C) tablets.

4.2 Ball-and-socket joints

The identification of so many cup marks as eyes and mouths leads us to question the meaning of "unexplained" ones, like the pair at the bottom left of the Waverly Tablet (fig. 1L). Although they often serve as eyes, perhaps here those of an owl, the fact that they also serve as ball-and-socket joints (Webb and Haag 1940:124) suggests that Adena beliefs emphasized pivots between conditions in this way as well. But the double and triple entendres between human heads, on the one hand, and avian heads, wings, and tails, on the other, suggest that spiritual conditions were considered to be enmeshed within the composite beings that are the subject of Adena tablets—and, it is likely, the Adena pipe.

4.3 The Lakin B Tablet

The Lakin B Tablet (fig. 6C; see Dragoo 1989 [1963]:219, fig. 18F) has been left out of much of this analysis because it eschews some of the mirroring devices of other tablets. But enough similarities can now be seen to reconstruct its order, in which the sequence of the left-column compartments is partially inverted in the right column. This may have lent mystery to the design since the equivalents of the bottom two compartments on the left are not mirrored in the same row on the right but on different registers. This makes the Lakin B Tablet (fig. 6C) the Adena equivalent of a disordered Rubik's Cube, whose secrets might have been further obscured for the uninitiated.

All the same, if one works one's way counterclockwise around the tablet from the top left, one can detect the following. Compartment 1 contains a human maskette, like those on the Wilmington and Meigs

tablets (fig. 1D-E), in the remnant of an avian head, which is missing all but two millimeters of the bottom of its beak due to breakage. Compartment 2 contains a head, whose contrasting, owl-like eyes in open and closed crescents lie along the longitudinal axis. This compartment also contains two eyed and hooked motifs, whose eyes lie along the outer edge. The hook for the top eye forms one side of the "owl's" face and curves around its more circular eye, while the bottom eye and hook are smaller and framed. The compartment below that (3) contains nested curves like a pair of meshed snakes, which unite to form the same kind of mask seen under the Wilmington Tablet "tail" bar (fig. 1C), when the Lakin B Tablet is turned so the maskette compartment is at top right. Compartment 4, at the bottom of the left column, is a serrated tail or wing compartment with a schematic head, whose eye is near the center, and beak that seems to be clasped between the beak of another head, whose eye is toward the outer corner. Compartment 5, which is at the bottom of the right column, contains a large bird head whose bulbous eye is in the tablet's corner, and whose beak points toward the central line. The compartment above that (6) remains enigmatic but probably contains eyes. Compartment 7 contains meshed eyed and hooked schematics that reflect the mask in compartment 3. The "eyes" are just as differentiated as those in the Meigs Tablet's more figurative bird heads, since one is a cupule and the other a slit. The final compartment (8), which is at top right, has a serrated edge like compartment 4, suggesting that it was meant to be read, at one level, as a tail or wing unit, and a bird head with a bulbous eye like compartment 5. Unlike the big bird in the latter, this one's beak points outward, not inward.

In other words, the Lakin B Tablet has many of the features we have come to associate with its cousins: hidden masks, bird heads at both ends, hooked and eyed schematics in tail zones, meshed heads, and even an anthropoid maskette.

4.4 New and missing links

It would be helpful to know more about the contexts in which the tablets were found, including whether their designs corresponded to their proximity to specific types of graves or other features—for instance, whether certain skeletons were cleaned by vultures, since such birds appear so often on the tablets. Unfortunately, most of the evidence for answering such questions has been irredeemably lost. Nevertheless, it turns out that the tablets themselves contain so much information about

their interrelationships that we can be confident that the elaborately engraved rectangular examples represent a coherent canon, despite their inventiveness and regional variants. 12 This means that it is reasonable to speak of an Adena cultural web that shared an ideological "grammar," despite having different "dialects" and overlaps with early Hopewell.

5. Ethnographic perspectives on the tablets

Although it is risky to interpret prehistoric iconography through ethnographic filters, since they are likely to create ahistorical distortions, the apparent continuation of graphic elements over long periods in related cultural areas means that ethnographic records can often offer illuminating perspectives. We have already seen how the Seneca celebrated the arrival of passenger pigeons as harbingers of spring with a dance involving the harmonious pairing of men and women. The association between the pigeons and spring is a reminder that other birds we have identified, including turkey and black vultures, migrate to the Ohio Valley to breed. Such observations add weight to evidence that the tablets contain a wide variety of references to cyclical phenomena, including celestial alignments (Romain 2009:89-117).

We have also considered the possible relationship between the tablets' large masks and Iroquois mythology concerning an "evil priest" with a medusoid head. But perhaps the best place to look for vestiges of Adena beliefs is among nearby cultures just before and after contact with Europeans. While most of that evidence comes from outside the central Ohio watershed, there is enough documentation from outlying areas to show that they were connected to the zone's Middle Woodland cultures both economically and culturally, with the "Mississippian Art and Ceremonial Complex," for instance, developing from the Hopewell Interaction Sphere (Townsend 2004). So we will make a few qualified comparisons.

One of the most intriguing lines of evidence for links between Middle Woodland and Mississippian beliefs is the similarity between Adena tablets and Hightower-style gorgets from eastern Tennessee. Both the tablets and gorgets illustrate bird-humans with beaks, wings, taloned feet, and tail feathers. One of the differences between

^{12.} Penney (1980:26) reached the same conclusion, writing that the "iconographic subjects represented in tablet designs are evenly distributed throughout the three geographic groupings."

the "birdmen" on the gorgets and the beings on the Adena tablets is that many of the "birdmen" have antlers, whereas only one of the tablets—the Bainbridge example (fig. 7A; see Caldwell 1997)—seems to show them. The presence of antler headdresses among the religious paraphernalia from some Hopewell sites (Romain 2009:41-43) suggests that antlers may have become more common in religious imagery as Adena waned and blended into Hopewell, making the Bainbridge Tablet one of the last in the canon.

The interest of all this is that thirteenth- and fourteenth-century "birdmen" are identifiable as early versions of a pair of "Heroic Twins" or "Thunderers" who play important roles in the creation of the natural world and human societies in nineteenth- and twentieth-century Amerindian stories (Lankford 2008). One of these twins grew up in the wild and creates disorder, while the other is civilized. After learning that they are both children of the Sun and undergoing ordeals to prove their merit, they take their places in the upperworld as beings who control thunder and lightning, as well as aspects of health and war. Their antagonist from the lowerworld in Shawnee and other myths is a Great or Horned Serpent. This being and its variants, which include the Ojibwa underwater panther, Mishibizhiw, are usually monstrous, with multiple heads, chimerical parts, large nostrils (like the ones seen on the Gaitskill clay mask, figs. 1B, 10D), and contrasting horns. This antagonism between complementary bird-humans associated with the sky on the one hand and a being associated with snakes, monstrous combinations, and the lowerworld on the other is reminiscent of the tension created across many Adena tablets by the blending of double-headed avian beings with human hands and faces and their opposite polarity, a grotesque being or "mask," which appears when the tablets are inverted.

But we should be cautious. Although it is tempting to see such stories as holding the key to understanding the tablets, the incredible diversity of tales about vultures alone—even within a single region, such as

the Southwest¹³—shows how risky it is to insist on any single interpretation. The myths told by Middle Woodland communities were probably as protean as their rearrangements of graphic elements representing body parts (Romain 2009:65, 114, 139).

This brings us to our final point, which concerns the wide range of evidence we have presented that the tablets and their iconographic Nodes were closely associated with one another, despite their distinctions. One of the most interesting things about Romain's reconstructions of complex Hopewell imagery is that he showed how the Hopewell used similar elements and combinatory possibilities while making objects of extraordinary originality. These similarities allowed

eagle opens an aperture, it is singed by the sun before it can fly high enough to open the sky properly. The chief then sends the Buzzard (Wicóko), who soars so high that he opens the heavens but loses his head feathers to the sun's fire in the process.

A Navajo story recounts how a female Yellow Buffalo turned into one of two buffalo women who were offered to a holy man by their mates (Reichard 1939). After the holy man killed the Buffalo-whonever-dies, who embodied all the Buffalo people and their life-force, the only buffalo who did not die were the two "buffalo women." The younger one roused the holy man from his remorse by suggesting that a person who can kill can also bring the dead back to life. When the holy man did so, only one buffalo failed to rise—a member of the Yellow Buffalo's "people"—because she had disobeyed the holy man by glancing at his ritual. The holy man told the buffalo people that their last resort was to ask four turkey vultures to bring the dead buffalo to life. The "people" offered the vultures precious skins and stones, but the birds refused to help. Then Big Fly whispered that all they had to do was give the vultures carrion. When the "buffalo" did so, the buzzards finally brought the Yellow Buffalo man to life.

Although the Zuni would not use vulture feathers as prayer feathers because the birds ate such carrion, they did use the feathers for less sacred objects such as masks. They also associated vultures with tobacco smoke because it resembles rain clouds, and, hence, with the ending of famine.

One of the most intriguing things about such stories, in light of the possibility that two of the birds on the McKensie Tablet (fig. 3C-D) may be turkeys, is that turkeys and vultures often play complementary roles in the Southwest. Although turkeys are confined to earth like humans, many Pueblo groups associate them with rain, because they move up and down mountains like clouds. Since the dead are also credited with making rain and life possible, turkeys are also symbols of life and death. Some of the stories even explain the baldness of vultures and turkeys in similar ways, since turkeys tried to raise the sun higher in the sky and burned off all their head feathers.

In conclusion, "buzzards"—and perhaps, by extension, their terrestrial equivalents, turkeys—are often described as powerful "medicine men" who can dispel evil, open a passage, resurrect the dead, break off contact with dangerous spirits, and even bless entire communities: in short, they make transitions possible and the world good. Could analogous stories and complementarities have informed the Adena tablets?

^{13. &}quot;Old Buzzard Man" stories in the American Southwest are often tales of purification, about bringing harmony back to an everyday world that has been shaken by death, famine, or killing game. Among the Hopi, for example, a member of the Honani, or Badger Clan (Nequatewa 1936:134), would use a vulture feather covered with ash to "dis-charm" participants who had been in dangerous proximity to spirit-powers during sacred ceremonies. They were able to return to their everyday selves by flinging the feather out of the kiva. Ash is the end product of fire and fire of life.

In another Hopi story, the Bear chief sends an eagle to open the sky to let in enough light for his people to find a new world. Although the

him to make great headway in deciphering individual Hopewell creations by identifying their common elements and structures. As we have seen, Adena tablets show the same tension between such local variants and common themes—or, to put it another way, between their "dialects" and underlying "grammar."

6. Conclusion

The identification of new features in the McKensie and other Adena tablets is both a cautionary and hopeful tale, since it provides hope that one can correct one's blunders and tease out new perceptions by returning to a subject with a fresh mind. But the fact is, an observer simply cannot see all the figurative images on any of the tablets at once, no matter how clear the motifs might seem when shown "right-sideup" in isolation. This is because the engravings were designed, like so much prehistoric imagery (Caldwell 2012), to be recognized in phases, with some elements only appearing in negatives or when tablets are seen from new directions. The more one knows about the tablets, the more one realizes that they represent some of the most tightly packed and encrypted embodiments of an ideology ever made. Many of them manage to incorporate several of the following attributes into postcard-sized images:

- 1. birds, including ones of different species
- 2. anthropomorphs whose bifurcated coifs represent outward-facing avian beaks
- 3. contrasting areas of light and dark
- 4. contrasting eyes, with and without pupils
- 5. dual orientations, with bird heads at both ends of a tablet or the appearance of a mask when the avian being is inverted
- 6. internalization, with beings containing—probably ingesting and even laying or excreting—intimations of themselves or other beings
- 7. looped sequences with passages through a body bar from compartment to compartment and phase to phase, in the presence of both internalized and externalized beings, some of them obscured from view.

Taken together, these attributes must have provided the mnemonics for the phased recognitions of an initiatory process and for the kind of worldview—with its ability to contain all of one's experience within warps, reflections, and paradoxes—that one expects of the most durable ideologies, in this case one that held sway over much of

the Ohio watershed for over a thousand years.

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^{14.} In September 2008, Richard Michael Gramly asked if he and David Walley of Archeometry Inc. could use a collection I curate to calibrate equipment that Walley had adapted for the analysis of subsurface weathering, absorption of solar radiation, and the antiquity of artifacts. The main interest of the collection from their perspective was that it contained artifacts from the Lower Paleolithic through the Mesolithic, which had been dated by AMS, thermoluminescence, and stratigraphic and other dating techniques (D'Errico, Lázničková-Galetová, and Caldwell 2011). Mr. Walley's determination, after calibrating the technology on several thousand Woodland antiquities of known authenticity as well as known forgeries, was that all the sculpted, incised, and even broken surfaces on the Bainbridge and McKensie tablets were not only ancient but produced results consistent with the Adena time frame. Upon witnessing the tests, Dr. Gramly announced that he wanted to write about them and asked me to provide him with images that had been used in preparing my 1997 article. As I was preparing them, the central hawk in the McKensie Tablet jumped into view.

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