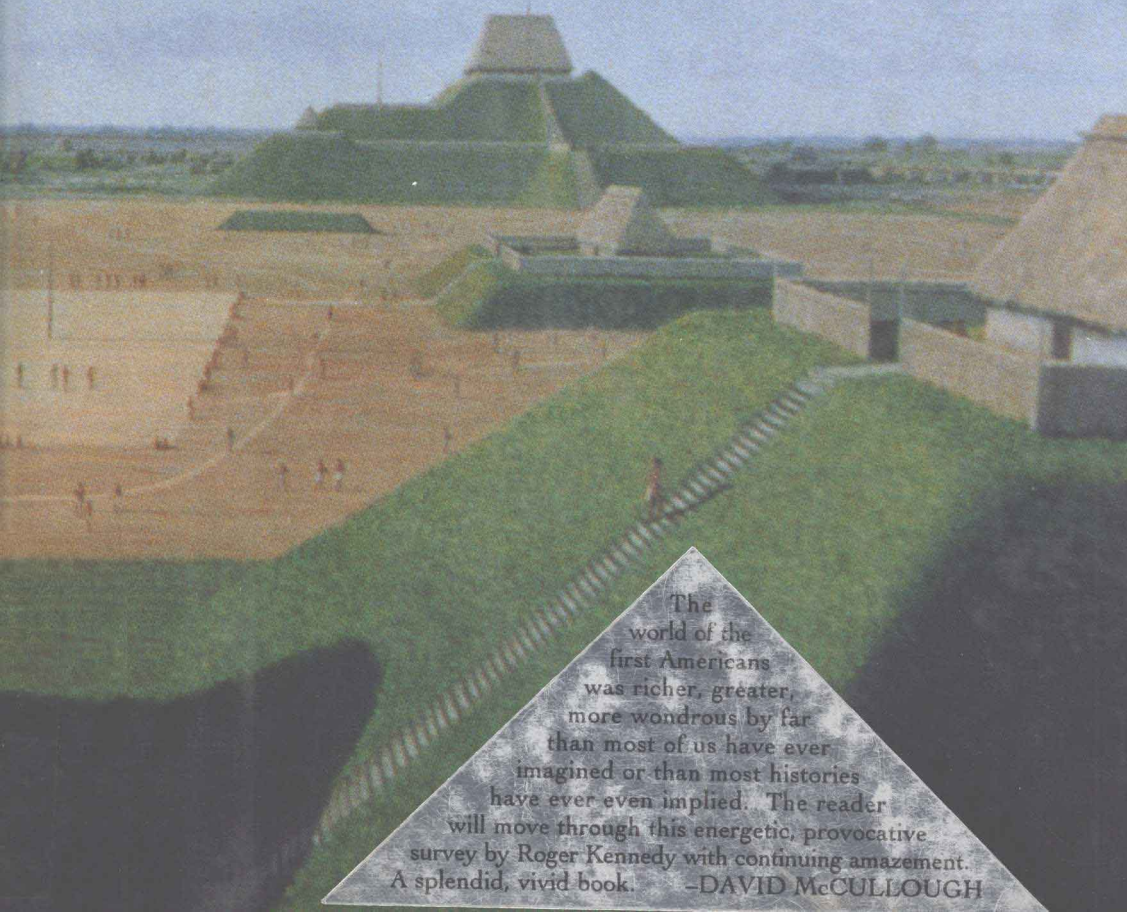
HIDDEN CITIES

The Discovery and Loss of Ancient North American Civilization

ROGER G. KENNEDY



The world of the first Americans was richer, greater, more wondrous by far than most of us have ever imagined or than most histories have ever even implied. The reader will move through this energetic, provocative survey by Roger Kennedy with continuing amazement. A splendid, vivid book. –DAVID McCULLOUGH

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Map of Louisiana created by Bartholemy Lafon, surveyor, cartographer, engineer, architect, and part-time pirate, who emigrated from France in 1790. He created the map shortly after the turn of the century; he had already discovered and explored many ancient moundworks (see Chapter 9).

CITIES AND BUILDINGS

The words *city* and *building* are used in this book in old-fashioned ways: by *city* we mean a place in which a large number of people gather for common purposes; citizens determine cities. By *building* we mean a large three-dimensional construction, whether made of masonry, wood, stone, metal, or earth.

Our English noun *city* comes from the Latin, as does our adjective *urban*, but they arise from quite distinct Latin meanings. The Latin *urbis* and its Germanic counterpart, *burg*, referred more to a place than to an aggregate of persons. The distinction is important because city carries from its demographic root the implication of intention. A city was the consequence of a purpose. Perhaps it is not so much a noun as the outcome of a verb; not a location but phenomenon. A city was where a relatively large number of citizens congregated—the city did not exist without citizens, whereas the urban setting, with its burghers, was, well, just there.

In the Middle Ages, in the British Isles, a city became a place in which a potent religious leader such as a bishop was headquartered. Bishops had, it seems, often located themselves in pious or strategic villages, but as time and travail went on, they found it prudent or pleasant to repair into trading centers.

In these ways, the modern city was formed, but only after the cities discussed in these pages had ceased to be. While they throve these knotted settlements were distinguished by their relatively large size from the hamlets dispersed throughout the countryside and by the intensity of the common purposes of their citizens as demonstrated by the monumental architecture created within their confines manifesting, it is likely, the presence of one or more powerful religious figures.

Build and *building* are also very old words, often used in this text as they were when the English language was being invented, to denote earthen structures.

About 1150, when the word *build* was first employed in English, it referred to the construction of an earthen grave. Three hundred and fifty years later, an early use of the term *to build up* was the description of the process by which King Priam of Troy constructed a "big town of bare earth." So when we refer to the earthworks of the Ohio and Mississippi Valleys as *buildings* no one should be surprised.

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INTRODUCTION

COMING OVER AND INTO THE VALLEY

The trail rises into a meadow where a lightning-burn is healing; on the far side, the land falls away through the spruce. Straight ahead is sky, the sky over the Great Valley.

There is a sweet exhilaration in coming to the summit of a pass where the brightness ahead shines through the last dark band of trees. The weight of a pack sack lightens; the hard part is done; the possible opens before us.

Eighteenth century pioneers passing over the Appalachians into the Ohio Valley wrote often of this feeling of being freed of encumbrances, of fresh beginnings. Judging from what they said, and from what has been said of them subsequently, most of them shared the misconception that they were entering an ample emptiness intended to be theirs alone.

In fact, they carried more baggage than they knew; only a few were able to cast off their preconceptions, and only after much bloodshed. The western vastness was not empty. Several hundred thousand people were already there, and determined to resist invasion. Nor was it without its own history, as the Europeans slowly acknowledged after encountering a profusion of very large ruined buildings. Whatever may have been the edenic expectations of the newcomers, it became obvious that the Indians of the Valley were the survivors of much larger populations.

Even along the headwaters of the Ohio, on the banks of mountain brooks, there were signs of ancient habitation in the form of small burial mounds. As the streams grew larger, so did the buildings on their banks. Below Pittsburgh, at Grave Creek, in what is now West Virginia, a conical mound is still today 2,700 feet (251 meters) in circumference and 70 feet (21 meters) tall. It was built by Indians while Rome was young.

Scores of structures almost equal to its bulk still remain, offering the commentary of the elders upon the coal dumps and slag heaps of the

Rust Belt, as the flares of disconsolate gasworks flicker where beacon fires once blazed. In the Ohio and Mississippi valleys, tens of thousands of structures were built between six and sixty-six centuries ago. Some, as large as twenty-five miles in extent, required over three million person-hours of labor.

Sometimes even so late as now, one of us may have an experience as unexpected and full of wonder as those of the first French trappers and British traders when they came among these structures. In the summer of 1991, I was in a cave, searching beneath Indiana for a source of a white mineral called aragonite, which was much favored for sculpture by the Ohio Valley Indians of the third and fourth centuries.

I had passed through a succession of caverns and slippery, narrow passageways. There had been no graffiti for half a mile, and I permitted myself the proud thought that I was the first of my species to come there. Then my head lamp showed on the floor the twisted fibers of the butt end of a torch, and there were sandal-marks in the dust.

I was late by a millennium and a half.

This discovery should not have come as a surprise to me. But though I have been writing American history for nearly fifty years, it was. Others know about that cave, and as the graffiti, some more than a century old, demonstrated, all the knowers were not scholars. But as I talked with friends about the probability that Indians were seeking stone for sculpture in Indiana caves while the Emperor Augustus was losing legions in the German forests, I found that I was not alone in my ignorance of America's ancient past.

This book began with my discovery of the torch and sandal-marks. They led me to learn as much as I could about the people who left them in that cave, and also about why only a few specialists seem to be informed about them.* What did the first European explorers and settlers know about ancient America? Why was that knowledge not passed on, expanded, revised, and made a necessary prelude to American history? The antiquities of Mexico or of Egypt are far better known than those of Indiana, Illinois, or Ohio, and not because they are larger or more ambitious intellectually.

As I have learned, there is as much to say about Euramerican lack of understanding of Indian history as there is to say about the Indians themselves.

The first generation of westering colonizers had little to prepare them for the possibility of ancient cultures as they came into the upper

*The curiosity about ignorance probably stems from the second profession which I have plied for many decades, that of security analysis, which has to do with the gap between what is true and what might profitably be learned about the reasons all investors do not agree as to that truth.

reaches of the Ohio Valley between 1770 and 1810. Daniel Boone did not read Spanish, and he knew only what had been learned of the West by the French and by the Charleston traders who had traveled to the Mississippi before he came into Kentucky. The traders had come out of the southern Carolinas, and reached the Mississippi by routes which happened to bypass all the major mound centers. Though the French had been installed around Nashville for decades, in terrain full of ancient ruins, they did not provide forewarning of massive archaeology to their competitors from Carolina or Kentucky. They were mercantile folk; neither by training, inclination, nor the beguilements of leisure were they to be diverted from their goods and ledgers. None of these early merchants was leisured and none seems to have had time for wonder; so, from the 1680s until the 1770s, antiquity slumbered as commerce fretted and scratched overhead.

Antiquity, it is true, had only recently gone to slumber, as time was counted in the Valley. It had been wide awake when in 1539 a Spanish expeditionary force led by Hernando De Soto hacked and burnt its way through active mound-building cultures from the Georgia piedmont to the plains of Texas. But antiquity was silenced soon enough. The would-be conquistadors who emerged into the Appalachian province from Florida left a legacy, though they did not establish colonies. Their legacy was disease. After their microbes thronged to accelerate the destruction already underway by those already loosed by sailors and slavers along the coast upon the Indians, who did not have the appropriate antibodies, an unbroken Indian tradition of many centuries was removed from the scene. It had been destroyed not by force of arms—De Soto's *entrada* was a failure—but by the silent insidious action of European plagues.

De Soto's was the first force of Europeans to enter the watershed of the Ohio, a region the British later called "the Western waters."* And Boone, even had he been fluent in Spanish, would have learned little about what to expect in the West. The Spanish interest in its culture was limited to what pillage might be gotten from its temples and palaces. De Soto's study of its architecture did not go beyond determining the best means to storm its fortifications. So his chroniclers lavished little language upon accounts which might have forewarned the

*Traders from Pennsylvania and Virginia had taken their chances beyond the Appalachians since the last decade of the seventeenth century, and had been busy in Ohio and Indiana since the 1730s.

They were mostly Englishmen and Protestant, with an English and Protestant set of preconceptions. Even if Daniel Boone had known the history of his native Virginia he would not have found it easy to admit that the Holy Communion had first been offered on the shores of the Chesapeake by the Jesuits, sixty-eight years before the settling of Jamestown, or to concede that De Soto had led the first Europeans to cross the Appalachians.

English, or the French, or Boone about the ancient buildings of the West. Not until the end of the eighteenth century did some Euramericans begin to show real curiosity in the history of their land and its peoples.

Some of the seekers and invaders who entered under the flags of Spain and Great Britain were pinkish in skin tone, others brownish or blackish. Some were free, some slaves, some indentured servants or slaves for a term. The pinkish ones, masters or servants, discerned themselves as distinguished by skin color from the darker people among them, whether slave or free, and from the people already present in the valley. The races were then said to be White, Black, and Red, though of course not a single person so described was or is, in fact, white, black, or red. The color scheme was artificial, but within it were categorized people of an infinite variety of colors. Rewards and penalties were meted out for no better reason than occupancy of one or another of those artificial categories.* One of our primary themes will be how, in the valley, these people, newcomers and those who had been there for thousands of years, played out their prejudices about each other.

It is true that among the Founding Fathers, the word "African" was virtually a synonym for slave, and "Indian" or "Red Indian" nearly synonymous with "savage."† But not all of them thought this way, and none of them thought so all the time. Many were better and more broadly educated, less prejudiced and more conscious of their opportunities, than they have been said to be by most of their biographers. Especially during the Jim Crow period of American history, from the 1880s through the 1940s, it was conventional to present the views of the Founders on racial matters as shriveled to the crabbed understanding of those who were then writing about them. Probably this was because it was embarrassing to acknowledge that the Founders might have felt obligations and opportunities upon which they failed fully to act. Besides, if, during that unhappy phase in American life, their foiled aspirations were too strongly presented, there was the uncomfortable

*I hope those who might think this a plodding way of describing race relations will arrest their impatience a little. I do not find satisfactory the hasty terms now in common currency for the groups of people under discussion. For example, who is an "African American"? Our ancestors came from Africa. No scientist withholds agreement from that proposition. The questions to which all our histories respond are: "When did you come out of Africa? Under what conditions? And, when you came together with others who came to your place by other routes, how did you learn about each other and treat each other?"

†Many of the Blacks who appear, too often silently, in these pages, came into the Valley unwillingly. They made their presence known by attempting to alter the arrangements being made to keep them enslaved. Sometimes they attempted to breach those arrangements by force of arms, sometimes by attempting to escape them.

possibility that the historians' own contemporaries might be induced to be as bold in their thinking as the Founders actually were.

THE NEW ORDER OF THE UNIVERSE

But that acknowledgement is required of us: the Founders had set out to create a "New Order in the Universe"—so they proclaimed on their Great Seal. They had hoped that their new nation might have been freed of the prejudices and superstitions of Europe. But the revolutionary generation was disappointed; the power of old vices was not broken.*

By the end of the patriarchy of George Washington (1789–1797), the Founders, most ruefully President Washington himself, acknowledged that those vices were so ingrained that they were not purged merely by a change of government. Human slavery, for instance, seemed fixed ineradicably within the American system. And though the West offered a second chance, the Founders were not so young as they had been in 1776 when things seemed simpler.

A second theme of this work, extending from the first, is that in the West the Founding Fathers missed a great opportunity. A third is that they knew it. This book has been written because I believe that we, too, have an opportunity and that we must not fail in it. We are likely to do better if we know what some of them attempted, and why they failed. The time has come for another mighty effort to fulfill the highest aspirations of the Founders in the central valley of North America, where they glimpsed the possibility of a work of redemption.

THE OCCASIONS OF GRACE

They had the benefit of a shock of discovery. In few instances in human history has architecture been so important in altering the impression of the nature of one people in the eyes of others. The Founders had not anticipated that they would find, in the West, large, sophisticated, and ancient work, performed by the kind of people still resident there.

That architectural evidence was too obtrusive to be ignored. The new cities of the central valley—Cincinnati, St. Louis, Marietta, Portsmouth, Lexington, Pittsburgh, Natchez, and Nashville—had to be

*These sentences are a summary of a diagnosis, offered in the opening chapters of my *Greek Revival America*, of the state of mind of the founding generation, in the aftermath of the first confederacy (1783–1789) and the decay of expectations of what might be achieved under the fatherly guidance of Washington, thereafter.

built by clearing away evidence of older ones. In the countryside there were hundreds of thousands of earthen reminders of prior habitation; there still *are* tens of thousands. The shock of these discoveries forced upon the Founders the possibility that Indians were not all savages.*

Since the Indians were *other,* and yet obviously human, it was not difficult for some of the Founders, especially George Washington and Albert Gallatin, to open their minds to the possibilities presented by the presence of Blacks, also *other* but human. Even Thomas Jefferson's French friends insisted that the Blacks, though enslaved, *were* fully human.

The Founders knew nothing of ancient Africa outside of a little learning about Egypt; had they known something of it at the time they were becoming acquainted with ancient America they might have enlarged their sense of Negro possibility considerably farther—and, by extension, their apprehension of what other darker-skinned people, such as ancient Americans, might have done. But they were neither so fortunate nor so bold. We *are* so fortunate, and we may be so bold. Knowledge of the past may help alter the present.

Fortunately for us, the Founders did not consume all possible salutary surprises about American antiquity. Some startling has been vouchsafed to us. Much has been learned in the late 1980s and early 1990s about our predecessors in the Great Valley, much that still imparts the thrill which encouraged the Founders to make the new beginning they promised themselves and the world.

And we may try again.

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*Those buildings asserted something new and important about the capabilities of the living descendants of their builders.

This is not to suggest that it was only through Indian architecture that the Founders came to respect Indians, to the extent that they did. The pioneers learned much from the Indians about agriculture, about clothing to be worn in the woods and upon the prairie, about modes of transportation, about pharmacology, and even about how to construct confederations, but little of what they learned seemed to astonish them as the architecture did. None of these other matters received from them the amount of explicit attention and the extensive scientific reporting accorded the mounds.

CHAPTER ONE

THE FOUNDERS OF AMERICAN ARCHITECTURE; THE CULTURES THAT NOURISHED THEM, AND THE GREAT DYING

The architecture of the Mississippi watershed is as old as that of Egypt. Though composed of other materials than the sandstone of the pyramids, the monuments of the Mississippi are as large in size and as regular in shape. Indeed, one of the most noteworthy qualities of ancient American architecture is that some of its forms were so regular that they were replicated precisely in locations many miles apart.

The first very large buildings created in North America were constructed about six thousand years ago; most were made by moving earth in baskets woven of vegetable fibers. These baskets, used throughout the valley for architectural work, were as large as the wannigans (wicker pack sacks) many nineteenth and early twentieth century Americans carried on canoe trips—some of us can still recall how heavy they were when filled. Several million baskets were filled with heavy clay for the construction of each of many structures in West Virginia, Louisiana, and Illinois.

Despite so much exertion, the eroded contours of these monuments are not, today, very impressive. After thousands of winters, plows, and pothunters have done their work upon them, they sometimes appear to be little more than discouraged hillocks, about the shape of rain-drenched haystacks. A few, however, remain very grand indeed.

Careful cross-sectional archaeology reveals the layering within these ambiguous shapes: brown earth, and often red clay, earth again, perhaps one or two more tiers or "lenses" of red, black-charred remains of buildings—ritually fired, we may assume—and still more earth, some of it so densely compacted that the fibrous markings of the baskets are still stamped upon it.

The Spanish and French who first saw these hillocks found it difficult to believe them to be the deliberate creations of mankind. They were so much larger than any work of architecture known to them. The entire facade of the Palace of the Louvre, in Paris, can fit easily within the space surrounded by the D-shaped earthen rings at Poverty Point, Louisiana, built at the same time as Stonehenge. The Papal Basilica of St. Peter in Rome, complete with its plaza and gardens, could be placed within the circular embankment at Watson Brake, which is probably at least a thousand years older than Poverty Point.

THE AGE OF THE RINGS

Knowledge of the age of the oldest Indian buildings is only now emerging from carbon and pollen dating. We know about the construction and occupancy of them from fragments salvaged from embers grown cold before Gilgamesh or Cheops came to their thrones—the reigns of these gentlemen are generally thought to have been after 2800 B.C.—and from microscopic remains of plants left unconsumed in meals prepared at the time cuneiform wedges were first being indented in Mesopotamian clay.

The Mayan calendar opens with a mythic date of 3372 B.C.; by that time the people of the Mississippi Valley were already creating monumental architecture. Before anything so ambitious had been built in Mexico, Central or South America, earthen buildings were arranged in strict and repeated geometric patterns along the bayous and channels in what are now the states of Louisiana and Mississippi. In the Mississippi Delta, two of the earliest complexes which can be dated with much precision lie near Monroe, Louisiana.* The Hedgepeth Mounds are on the Bayou Darbonne, about twenty miles to the northwest, and probably were built around 4500 B.C. Above Frenchman's Bend, on the Bayou Bartholomew, fifteen miles northeast of Monroe, are a row of mounds whose carbon dates establish them as about a thousand years younger.[1]

On the campus of Louisiana State University, at Baton Rouge, is the most ancient evidence of the propensity of humans for architecture to be found so conveniently to learning anywhere in the world: two coni-

*Outsiders conventionally confine the term "delta" rather arbitrarily to a portion of this vast silty effluvium, that lying on the modern course of the Mississippi below New Orleans. But ancient rivers draining the upper Mississippi basin have left channels across most of the present states of Louisiana, Arkansas and Mississippi. Local people begin referring to their delta, and singing Delta blues, not far south of the suburbs of Memphis, Tennessee, in the territory through which De Soto's people ravaged their way toward a crossing of the Mississippi itself.

cal mounds, the larger about 130 feet in diameter and 16 feet high, the rich organic soil of which was put in place about 3000 B.C. Six miles north, at Monte Sano, two even earlier conical mounds were destroyed in 1967. They included platforms probably used for cremation, and a structure built on posts about twenty feet square, which may well have been the oldest wooden building of which the plans are clear. A close approximation of what such plans might have been can be derived from the Monte Sano postmolds, where the posts have decayed leaving spaces subsequently filled by earth compacted differently from its surroundings. What a treasure! And it was protected by the compassionate earth until people of our generation saw fit to destroy it.

The story of the five-thousand-year-old mounds at Frenchman's Bend is, so far, happier: a remarkably sympathetic developer recently agreed that its principal building will not become the seventh tee of a golf course.* I recall poignantly the day that concession was made, and how proudly he drove away in his Landrover, more worthy of the best Abercrombie and Fitch could provide than any competitor in the Mississippi Valley. Five mounds are still discernable along the edge of the fairway, the largest a low, haystack-shaped cone about 130 feet in diameter and 10 feet high. The relationship of the five to each other appears erratic, but appearances may not disclose lunar or solar alignments, or some other ordering principle we do not yet understand.

About five thousand years ago, monumental American architecture began to be created in circular or half-circular—D-shaped—forms, the largest of which are so striking that they justify calling the ensuing three millennia in American architectural history the Age of the Rings. Even more precise circles continued to be built thereafter, but they

*At Stelly, in south central Louisiana, are mounds which have recently (January 1994) been dated to 2700 B.C.

At Banana Bayou, a small conical mound on the Gulf Coast, and at Avery Island (a salt dome known for its tabasco sauce) on the Gulf Coast, artifacts and carbon dates suggest a date of about 2500 B.C.

As the time scheme settles closer to 2000 B.C. a score or more sites in Louisiana can be added to the list, with complexities increasing until one comes to the full panoply of six mounds and six concentric enclosures at Poverty Point, see below, the most elegant construction since the ten at Watson Brake, not all of which were necessarily as old as that dated to the pre-Poverty Point period.

There are very early sites on the Gulf and Atlantic Coasts, as well. At Claiborne, Mississippi, for example, a half-circular earthwork was placed on top of a midden and topped by another layer of midden (midden is often the refuse of human habitation, and sometimes a deliberate aggregation of human products). Its outside diameter was 700 feet. A small conical mound lay 1100 feet to the east. Carbon dates were found amid the upper midden for about 1100 B.C., 1500 B.C., and 2000 B.C.

There will be further discussion of the Atlantic Coast sites below.

were now accompanied by the first appearance of square, hexagonal and octagonal ground plans on a large scale.*

The first great expression of the Age of the Rings to descend to us in still recognizable condition lies just outside the southwestern sprawl of the little city of Monroe, on the opposite bank of the Ouachita River and eighteen miles south of Frenchman's Bend, at Watson Brake (a "break" is a breech in natural levee of a river, forming a backwater). This oldest monumental circular building yet discovered in North America was probably begun at about the time as the complex at Frenchman's Bend.† Its primary form is a circular embankment three-fifths of a mile long, 820 by 650 feet across and about 3 feet high. The ring is punctuated by ten mounds, one of which rises nearly 28 feet higher. These punctuating mounds of earth atop the platform ring, confronting each other across a flat space or plaza, distinguish the Watson Brake earthworks from thousands of circular mounds of earth or shell across the Gulf Coast and along the rivers of the South and Midwest.‡

*There is a large literature of archaeoastronemy for the lower Mississippi Valley, approaching the bulk of that for Stonehenge and for the Anasazi work of the Southwest. We are classifying animals. When we speak of "regular" or "geometric" architecture we usually mean something which fits neatly into one or another of the containers already present in our own psyches. Plato probably was referring to this bottling process when he spoke of thinking like gods, or thinking *along* with, as one *sings* along with, the eternal patterns of the universe.

Carl Jung, the Swiss psychologist and theologian, knew something of American antiquity, but only that of the desert Southwest. It is likely that he would have discussed Louisiana hillocks in Platonic terms had he stopped in Monroe on his way to Santa Fe. Will the time come when it is no more necessary to identify Jung than Plato? In any case, without Plato or Jung to assist us, we tend to dismiss the unfamiliar because it challenges our ability to place it within one of our preexisting categories, sometimes rejecting data delivered to us by our senses only because we have no place to put it. Meanwhile, we must use the language of the familiar in geometry, and write of circles, octagons, and squares, though surely we must be missing other forms which we cannot perceive.

†So far, the requisite carbon for dating has eluded the archaeologists working at Watson Brake, though they have found the baked ceramic cubes characteristic of other structures such as those at Frenchman's Bend and other sites of the same age.

‡Many are probably refuse heaps, left behind as Indians consumed the bivalves within those shells. Some are more stately than that, laid out in large circles empty at the center, so large that they could not have been casually constructed. Sometimes they are very regular in outline, as if drawn first on a template and then built. Many of these can be found on islands along the South Carolina, Georgia, and Florida coasts.

On Sapelo Island, one of the largest is still partly preserved in an ancient forest of oak and cedar. It is about 310 feet in diameter, rising 10 feet from a base about 36 feet wide, forming a total height about 23 feet above a muddy river. It was inhabited (perhaps one should say more cautiously that it was in regular use) between 100 and 1800 B.C.

The presence of pottery fragments at Sapelo confirms that though pottery was not used at Poverty Point, it was within the repertory of Indian crafts five hundred years earlier.

The discipline, prowess in engineering, and regularity in plan presaged at Watson Brake was carried to its fulfillment a thousand years or more closer to our own time and about fifty miles to the east, at Poverty Point. An immense complex of earthen buildings, now known by the name of a plantation which began plowing down that architecture in the 1840s, lies upon Macon Ridge. That it is a ridge is discernable only to people living in very flat country, for it appears only as a modest swelling of alluvial fan deposited perhaps thirty thousand years ago by the Arkansas River as it entered the Mississippi flood plain.

The people of Poverty Point were either successfully organized or (more likely) shared a community of religious interest, for in several extended building campaigns over five centuries they labored upon seven miles of embankments forming six concentric half circles. These embankments are cupped to face the bank of the Bayou Macon (pronounced "mason"), thirty feet below. At the center of the outermost ring, which has a diameter of four fifths of a mile, is an enormous mound, 705 by 656 feet and 70 feet tall.*

Stonehenge, built at about the same time, could be fitted seven times into the enclosure at Poverty Point. Nothing on Salisbury Plain is of the scale of the central mound, thought by some to be an effigy of a falcon, though to more prosaic folk it now seems shaped like an enormous melted chair. There may have been a small platform at the top, and there remains a lower platform 13 feet above the plain.† This two-stage

*The terrain of the Delta today is not the landscape seen by the people who first lived there. In 16,000 B.C. the last great glacier, two miles thick in places, had frozen into itself enough of the seas so that the sea level was as much as 350 feet below its current level.

As the ice melted and released the seas, waters rose from the coast to meet glacial waters flooding down the valley from the interior. This did not happen quickly; the emergence of present shorelines took thousands of years, during which humans did the best they could to live in the area, and were confronted with constant change.

Time and time again, works of art and architecture were buried beneath water and silt; there is no knowing what was lost, how many ancestral homes and ceremonial centers relinquished.

Today, one can cruise about the shallow waters of the delta by boat, a few feet above submerged ruins. Our ignorance of this antiquity is, and must be, abysmal. Ancient mounds barely obtrude above low tide; plazas which once held throngs of people are now twenty or thirty feet below channels, across which the motorboats of fishermen make their daily rounds.

Even the surface level of upland sites such as Poverty Point have been lowered by ten or twelve feet by plowing and erosion.

†The notion that this much-eroded and battered mound might initially have been shaped to suggest a falcon with widespread wings is not so fanciful as it sounds. Stone and shell carvings found on the site do take the form of such birds, specific even to the presence of talons. The falcon is a familiar ornamental, or incantory shape, in Indian art in many places in the Mississippi Valley, Mexico, and Central America. Falcon effigies in stone are to be found in Georgia, and in earth along the upper Mississippi.

ascent is one of the unifying forms of these very early mounds.* Ten million basket loads of earth would have been required to complete the work of leveling this plain and then building these structures.[2]

Joe Saunders, an archaeologist who has been working at Watson Brake, Hedgepeth, and Frenchman's Bend, has found that several of the mounds in these complexes also appear to have "aprons" like those of the "falcon mound" at Poverty Point and Motley. All seem to provide for a choreographed movement: coming from the bayou or river one climbed the bank, probably by a graded way, to come out into a plaza. Then, before the great mound, there may have been a court of honor, and above it, on the first level, a place even more restricted. Finally, perhaps beside a pyre or beacon, one might be admitted into the presence of a person of the highest honor.

This use of earth to provide a succession of sacred spaces on ascending platforms persists in American architecture from 3000 B.C. Through the creation of the immense structures of the period between A.D. 1000 and the arrival of the Europeans. The most prominent of these still to be observed today are at Etowah, in Georgia; at Emerald, near Natchez, Mississippi; at Moundville, in Alabama; and at Monks Mound at Cahokia, Illinois. At Cahokia, the sheer size of Monks Mound, with its many ramps and platforms, permits us to visualize easily a graduated ascent to sanctuaries of ever-increasing solemnity—with the sanctum sanctorum at the very top. The great pyramid at Cahokia is greater in extent than that at Gizeh, in Egypt.†‡ Well into the eighteenth century, the Indians—Natchez, Cherokee, Creek, and Caddo—were still building mounds of this sort.

When one comes on foot into the open space at Poverty Point, there is a powerful impulse to seek definition of its huge extent by finding the bounds set by the outer ring, and to get some sense of scale from its hulking mound. But if one approaches Poverty Point from the air, after surveying the archaeology of the Louisiana and Mississippi delta land, it is the *innermost* ring which rivets attention. It is 2,000 feet in diam-

*A mile and a half north of the Poverty Point group is the Motley Mound, somewhat smaller but similarly shaped. After severe erosion and the trucking away of most of its "tail" for highway fill, Motley is still more than 49 feet high and what is left of it is the length of a football field.

†To keep things simple, references to locations will be given in contemporary terms, without wearisome repetitions of such modifiers as "within the present-day borders of" or "in modern."

‡Monks Mound is so called in tribute to a Trappist Monastery built on one of its flanks in the eighteenth century.