

The Parthenon: Yesterday, Today, and Tomorrow

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Abstract

One of the world's most beautiful and iconic structures, the Parthenon, the temple of the Virgin goddess Athena, boldly displays the culmination of culture and civilization upon the Acropolis in Athens, Greece and in Centennial Park in Nashville, Tennessee. I have attempted to research the history, architecture, and sculpture of the magnificent marble edifice by analyzing the key themes and elements that compose the great work: culture, civilization, and rebirth. Using a musical sonata form to display my research, I wished to convey a digestible analysis of how the Parthenon and its connotations transcend time through rebirth in Nashville, Tennessee. Known as the "Athens of the South," Nashville continues the culture displayed in Ancient Greece and symbolizes this through the city's scale replication of the Parthenon within Centennial Park. In the first century A.D., Plutarch wrote Greek history so that the Greeks could recall the history that was gradually fading from their memories. As Plutarch did with his readers, I am attempting to re-educate Nashvillians, as well as the world, about the rich history and inheritance of the Athenian culture within ourselves.

Introduction

In various ways, every world civilization has attempted to explore and improve the quality of life, promote communal well-being, and further the education and the creative abilities of its people. One of the most successful civilizations in these endeavors was that of the ancient Greeks. Our contemporary fine arts, education, and forms of government ground themselves, in one way or another, in the “Classical” soil of ancient Greece. Classical civilization has been one of the most significant shaping influences for refined society in Western history, constituting the foundation for any modern attempt to further the ideals of civilization in civil affairs.

One of these more recent attempts for civil advancement has been the establishment of the United States. However, one of the states, not long after its acceptance in the U.S. in 1796, emerged as the cultural leader and exemplar for new states seeking admittance into the newly expanding Union—Tennessee and its capital of Nashville. By the turn of the 20th century, Nashville was a fully established cultural center focused on cultivating the best forms of civilization to suit a new nation. Though ancient Athens and contemporary Nashville both have elements in their history that count strongly against them in terms of “quality of life” and “communal well-being,” such as slavery, Nashville nevertheless continues the best aspects of the Classical tradition and attempts to improve upon them. Nashville’s museums and history celebrate the abolition of slavery and, today, the city still leads the way in promoting a greater equality for all. Therefore, not only does Nashville exhibit and continue the best classical roots of Athens’s innovative civilization, but it also attempts to refine them so that an even better form of civilization might flourish within the purest forms of government, education, and fine arts for the sake and benefit of the people. Evidence for this gradual shift and improvement of the Classical heritage is Nashville’s eventual response to slavery. Despite the contested opinions of slavery and inclusion in the Confederacy during the Civil War, Nashville eventually helped Tennessee become one of the first Confederate states to ratify the Thirteenth Amendment. Even today, this improvement still exists as Nashville seeks to foster diversity, equal opportunity, and freedom for all.

Grounded in the model offered by the Greeks, despite any flaws we might note now, Nashville nonetheless was born on the edge of the “wild frontier” of America, setting the stage for the rebirth of the “civilization over barbarism” binary that still persists in American culture. Many schol-

ars might deny any direct correlation between Athens and Nashville, but I argue that submerged elements within these two cities connect them more than might appear at first glance. It is important to recognize Nashville's reputation as "Athens of the West" (and later "of the South") and how this reputation manifests itself in order to understand the improvements and rebirth on original Athenian culture Nashville offers. The most obvious manifestation of this reputation is the presence of the duplicate Parthenon within Centennial Park in Nashville, Tennessee. Exploring the history, construction, architecture, and sculpture of the two Parthenons, I will show how the connections between the two cities (despite a separation of 2,000 years) has helped Tennessee continue—and develop—a Classical civilization rooted in ancient Greece.

In order to display these connections effectively, I have chosen a musical form, the sonata-allegro, as well as the labels of its constituent parts, to organize information about these two cities and bring out parallels. The sonata-allegro structure usually attempts to present two seemingly opposing musical themes in the Exposition, develop them through motivic deconstruction in the Development, and integrate the opposing themes harmoniously in the Recapitulation, leaving the listener satisfied and affected by the final cadence (Spring and Hutcheson 197-224). I hope that this research on the Parthenon as a symbol of the Athenian and Nashvilian civilizations and cultures show that Nashville, Tennessee, truly is the "Athens of the South."

An Exposition

A blazing chariot of Helios declines to the horizon as his hot rays reflect off large mounds of broken marble. Glimmering through towering, marble giants, and dancing across the empty inner floor on the roofless ruin, the sun distinguishes the mighty duel between the powerful god of the sea and the goddess of wisdom, a recapitulation of the origins of civil prosperity. Heroic images of the violent clash between the Athenians and the Amazons, protruding dynamically from the threaded narrative, burn with fury in the searing sunset. Yet, Helios rises as he falls, the newborn morning light simmering in the drops of dew surrounding the concrete aggregate steps. A tremendous king gives birth to the wise goddess once more, as the light simmers over the horizon, highlighting the victorious birth with the Olympians' wrestling the barbaric giants below. Helios's chariot ushers the decline of an age of Athens, Greece, and the birth of a new age in Nashville, Tennessee, as the sun never sets on the iconic symbol of democracy and civilization—the Parthenon, temple of Pallas Athena.

A Development

The Parthenon and Its History: Then and Now

Since the late fifth century B.C., the Doric Temple known as the Parthenon, or Temple of the Virgin goddess Athena, has remained through the ages and is still considered to be one of the most beautiful buildings in the world. Enriched with an astounding history of war, death, politics, religious tension, theft, fortune, misfortune, and theft for the sake of preservation, the Parthenon, its architecture, sculpture, and the statue of Pallas Athena in Athens and its reproduction in Nashville, can never be adequately discussed or researched without accounting for its powerful history. This history enlightens us to the Parthenon's purpose and amply allows us to be in awe of one of humanity's greatest works.

The origin of the Parthenon has its roots in the early fifth century and the Persian Wars. Victory at "The Battle of Marathon [490 B.C.], often considered a turning point in the history of Western civilization," sparked patriotism in Athens (Camp 47). Had the tide of this battle turned, the entire Western tradition, as we know it today, would have been drastically different, diminishing the Greek's influence upon modern Western culture. Celebrating their victory, the Greeks constructed temples for the gods. Some researchers assert that the temple planned for the Acropolis was one of these temples. Most modern scholars and archeologists title the Acropolis temple the "Pre-Parthenon" and the "Older Parthenon," since it was probably built in appreciation to Athena for her protection and victory in defeating the Persians at Marathon. However, the history and existence of the Parthenon can be traced even further to the Athenians selecting Athena as their goddess over Poseidon, a theme in the architecture of the Parthenon's west pediment.

Before construction was finished on the "Pre-Parthenon," the Persians invaded once more in 480 B.C., aiming for the heart of Athens—the Acropolis. They destroyed the city and its sacred structures. Deserting the city, the Athenians vowed to leave the Acropolis in ruins and the "Pre-Parthenon" unbuilt as a memorial for those Athenians who remained to defend and died in the siege. It should be taken into account that the "Hellenes had long followed a code by which the holy places of enemies were respected and spared during the war," so the Greeks were thoroughly shocked at the Persians' actions (Connelly 72). In honor of those who sacrificed their life defending the Acropolis, they swore:

. . . the famous oath said to have been sworn by the Greeks just before the Battle of Plataia in 479 [B.C.] [that] included this line: “I will not rebuild a single one of the shrines that the barbarians have destroyed but will allow them to remain for future generations as a memorial of the barbarians’ impiety” [cited from Lykourgos’s *Against Leokrates*] . . . its citation in both the literary and the epigraphic records suggests that it was real. (Connelly 82, 121)

Both the unfinished “Pre-Parthenon” and the oath taken after the Persian invasion become important to the history of the Parthenon that we know today.

With the newly formed Delian League and Athens as the head of the alliance due to their powerful navy, the *poleis* could donate money or ships to the war (Camp 61). Most donated money that amounted in fortunes, setting the stage for the possibility of a newly built Acropolis, though this was not in any Greeks’ agenda due to the Persian War and their oath. With the rise of Perikles as the political leader in 461 B.C., Athens reached its height of the Golden Age of Greece, a “time when art, theatre, philosophy, and democracy flourished to a degree not seen before and only rarely seen since” (Camp 72). After another raid and defeat in Egypt in 455 B.C., the tributes were transferred from their original location in Delos to the Acropolis, causing Athens to flourish financially under Perikles’ rule.

Sometime after this, the Delian League negotiated the Peace of Kallias with the Persians, ending the necessity for the League. With the treasury of the League in Athens and the war over, Perikles recommended the tributes be used to reconstruct temples and build various other structures, especially on the Acropolis, and the Plataian Vow be nullified. Perikles’ program was not accepted positively, however. Many Greek citizens saw the use of the Delian treasury for the funding of new embellishments in the city questionable (Plutarch, *Pericles* 12.1-2). Justifying the use of Athens’s money, Perikles countered that it was given as a means of defense from the war and was therefore a sacrifice from those contributing to Athens. He moved to fund such works that would “bring her [Athens] everlasting glory” (12.4). Thereafter, all such oppositions to his building program, such as his chief opponent Thucydides, were ostracized.

Once approved, the project began under the “general manager and general overseer” Pheidias (Plutarch, *Pericles* 13.4). The Parthenon was one of the first built in the program. Since the Parthenon was not only a house for Athens’s goddess Athena, but also doubled as a treasury for the Delian funds, the construction’s completion was thought to take multiple

generations. However, it was completed entirely under the rule of Perikles. The Parthenon, as well as the Nike temple, the Erechtheion, and the Propylaia on the Acropolis, was built during the highest point in Athenian history with the means for the best materials, contractors, and artistic skills available (Camp 74). Beginning construction in 447 B.C., the Greeks dedicated the statue of Athena, Phiedas's masterpiece, in 438 B.C. and completed the architecture around 433-432 B.C.

An architectural masterpiece, the Parthenon primarily stands as the house of the goddess Pallas Athena. When analyzing historical accounts and archeological records, the flourish of the Athenian's power primarily emerges. The Parthenon was built for worship, appreciation, and victorious celebration for Athena's protection in the Persian War. The Parthenon shows the limitless power of Athens to the world. Though some Greeks considered the program to be theft of the treasury, most believed as Perikles that they were fortunate and should repay appreciation to the gods.

After Roman domination in 86 B.C. and the rise of Christianity in the later Roman Empire, the Parthenon ceased to be associated with the Virgin Athena and instead became a house of the Virgin Mary. It served first as a Christian basilica and then became a church later in the thirteenth to fifteenth centuries A.D.

The use of the Parthenon as a Christian cathedral continued until it then became a Turkish mosque after the Turkish invasion in 1456, after the fall of Constantinople in 1453. War and conflict thread the entire history of the Parthenon, reaching a pinnacle when the Venetians attempted to seize the city in 1687-1688. During the attack on the Acropolis, a mortar permeated the Parthenon's roof, falling upon the stored ammunitions of the Turks. The Parthenon, "which had remained largely intact until then," was extremely damaged (Camp 242). The Venetian General Francesco Morosini further damaged the Parthenon attempting to remove figures from the west pediment and removing three marble griffins (The Trustees of the British Museum 8; Camp 242).

The official use of the Parthenon as a mosque was around 1700, but it ceased due to deterioration in 1842 (Camp 243). Before the removal of the mosque, one of the most debated aspects of the Parthenon's history can be labeled "theft for the sake of preservation." According to the Trustees of the British Museum, Thomas Bruce, Lord Elgin, created a proposal to endorse the arts (9). When this proposal did not pass in the government, he decided to undertake the program under his own name. His program included journeying to the Acropolis with architects and artists to reproduce

elements of the Acropolis's structures in drawing, measuring, and molding in 1800-1801. Upon arriving and beginning their work, they noticed the rate at which the precious sculptures were being stolen and destroyed, and they resolved to get permission to take all sculptures and inscriptions that did not structurally interfere with the works or walls of the Citadel (The Trustees of the British Museum 11). After receiving permission to do so, they had an eventful voyage to Britain where Elgin disappointingly sold the collection he had taken from Greece for thirty-five thousand pounds to the British Museum (The Trustees of the British Museum 16). Today, there is a grand dispute over who should have the right to the sculptures and whether or not they were removed illegally from the Parthenon.

The Parthenon would continue to survive in the Greek War of Independence and eventual independence of Greece in 1833, with Athens as its capital. The establishment of a solid government greatly contributed to the preservation of the area's history. Salvage excavations and restorations regularly maintain the structures and historical sites such as the Parthenon. Plutarch best stated the essence of the Parthenon and Acropolis and prophesied its greatness, glory, and history by stating, "they were created in a short time for all time" (*Pericles* 13.3).

Truly, the Parthenon's legacy continues, as the full-size replica located in Nashville, Tennessee, embodies the elements of the Ancient Parthenon. The Nashville Parthenon parallels with many of the same themes and historical contexts that surround the Athenian's Parthenon. In the fall of 1893, Colonel W.C. Smith proposed a Centennial Exposition to celebrate the State of Tennessee's centennial in the Union to stimulate the economy from the country's recent depression and to heighten the state's patriotism (Kreyling et al. 124). Once a Tennessee exposition approved, Major E.C. Lewis was elected director general and oversaw the project in 1895. As a part of Lewis's plan, the central location of the Exposition would be a Fine Arts Building constructed as a replica of the Parthenon.

Considering that this was a widely accepted plan, the matter of why Nashvillians would reconstruct the Parthenon and place it at the center of the Exposition emerges. As many modern scholars of Nashville point out, some Nashvillians and most visitors do not understand the significance of the Parthenon in Nashville and its symbolic nature. Nashville is the "Athens of the South" (Kreyling et al. xi). Since the settlement of Nashville in 1780 with the Cumberland Compact between James Robertson and John Donelson's settlement parties, education was highly prioritized and valued, especially a classical education usually given in seminaries for ancient studies. What was then a frontier settlement eventually grew to

a considerable size. At that time, figures as Andrew Jackson and William Strickland played valuable roles in promoting neoclassical architecture in the late eighteenth century. However, “the person most responsible for the specific identification of Nashville with classical Athens was Philip Lindsley, president of the [now-defunct] University of Nashville from 1825 to 1850” (Kreyling et al. xiii). Even though speculation exists that the phrase “Athens of the West” was used to denote Nashville as early as 1840, the phrase emerges on record in 1859, when a student of Lindsley wrote of him and his impact on Nashville after his death, crediting him with the phrase (Kreyling et al. xiv). With the cultural ideals and values in art, community participation, and education—echoing the Greeks’ cultural ideals—it is easily understandable to see Nashville as an emerging center for culture and the arts. Even though education plays a significant role alongside art and architecture in Nashville’s heritage, the true relation between Athens and Nashville runs much deeper. The arts displayed are a manifestation of the culture, and the education is a continuation of it. The culture itself promotes refined civilization, and that is the key feature linking the ambitious Nashvillians to the ambitious Athenians. Not all will agree with President Lindsley or me, as J.S. Buckingham did in 1841 when he stated:

Though the farmers of Tennessee may have their country studded with classical names . . . it will take some time before their prose compositions will equal those of Demosthenes, or their poetry rival that of Homer; there being only one feature in which they resemble the Athenians—though it must be admitted on much more slender grounds—namely, that of thinking themselves the only polished and refined people on the earth. (Kreyling et al. xvi)

Certainly, he noticed Tennessee’s value in Classical Antiquity, but he prioritized the wrong aspects on his visit from England. Tennessee, and more specifically Nashville, revolves around the determination to achieve and perfect civilization, all inherited from the Greeks—an example also followed by the U.S. Founding Fathers. When beginning a new nation and a new city, the requirement was obvious—return to the roots of the western tradition and create a new culture and civilization modeled on one of the best the world has seen.

Since Nashville is known as the “Athens of the South,” it is merely an act of convention to place a replica of the Parthenon at the heart of Tennessee’s Centennial Exposition. Receiving drawings (some from the French diplomat Jacques Carrey in 1674, showing the building thirteen years

before the explosion in the Turkish-Venetian conflict), recordings, and architectural records from King George I of Greece, the Exposition Parthenon was underway (Kreyling et al 125). Just as the Periklian program, the Exposition Parthenon was the first building completed. Additionally, no other building at the Exposition was built intentionally as an exact replica like the Exposition Parthenon. It was the world's only exterior replica of the Parthenon with that detail.

Inside, the Exposition Parthenon housed an extensive art gallery, reflecting Nashville's artistic culture and American paintings. Built of "staff," an exterior-grade plaster, the Exposition Parthenon was intended to be a permeant fixture, despite some records that indicate it was meant to be disassembled after the six-month exposition.

After the Exposition, the Exposition Parthenon remained, and the Board of Park Commissioners formed in 1901. The Board gained the site of the Exposition, and Centennial Park was born. Due to the disintegration of the "staff" used to create the Exposition Parthenon, it was in disrepair many years later, and eventually, the pediment sculptures were removed since they were a safety hazard (Kreyling et al. 126). Noting positive public response to the structure, plans were arranged to build an even more permanent Parthenon. Plans were then made to rebuild an accurate Parthenon using much of the same reinforcement from the Exposition Parthenon. Therefore, just as the Athenians had a "Pre-Parthenon" with a period of time before the Parthenon, so Nashvillians had the Exposition Parthenon before rebuilding a permanent replica of the Parthenon.

Two of the larger differences between the construction of the Parthenons, the Athenian and the Nashvillian, would be the time of completion—as the Nashvillian project was delayed due to funds (a problem the Athenians did not have), and slavery and war. The Civil War can be associated with the Nashville project insofar as the intent of increasing patriotism by celebrating Tennessee's centennial anniversary within the Union. Even though Athens and Nashville both had a history of slavery, the Nashville Parthenon was not built by slaves. Rather, it was built by paid labor to represent Nashville's cultural leadership before and after the Civil War and Reconstruction. By recounting the history and analyzing the architecture of the Parthenons, I hope to achieve the same as Plutarch when he concerned himself with educating the Greeks of their history that they were gradually unable to recall.

The Parthenon and Its Architecture: Masterminds at Work

The primary framework when considering the Parthenon is its function

in the worship of Pallas Athena; therefore, the architecture and structure has intent in every aspect. Acting as a setting and display for the goddess, the structure of the Parthenon itself embodies the act of worship to Athena. Much genius and effort was behind each detail of the Parthenon, making it the most unique all of Greek structures. While Perikles appointed Pheidias “general manager and general overseer” of the building program, other architects oversaw construction and are named by historians as “Iktinos (named by Pausanias, Plutarch, and Vitruvius), Kallikrates (Plutarch), and Karpion (Vitruvius)” (Camp 74). Plutarch lists the many materials, artists, and labors (Plutarch, *Pericles* 12.6-7). With their expertise, the structure was completed in ten years, begun in 447 B.C., and dedicated in 438 B.C., with the remaining sculptures completed in 432-431 B.C. The oblong Doric temple with various Ionic elements rests four hundred and fifty feet above sea level measuring two hundred and thirty-eight feet long by one hundred and eleven feet wide by sixty-five feet tall, measuring to the peak of the pediments, and including the lower steps. Three key elements distinct this temple from all others in Greece—the plan, the refinements, and the sculptures.

The elaborate plan began with the foundations, and the contractors resolved to place it on the pre-existing platform left from the “Pre-Parthenon,” the best place to achieve the crowning feature when viewed from the south and west, making it seem to be the most important structure on the Acropolis (Anderson and Spiers 117). To place the Parthenon on the Acropolis perfectly to achieve the desired effect, the “Pre-Parthenon” platform was fourteen feet too large at the east end and five and a half feet too large at the south side, but on the north side, eleven more feet were required to place the temple perfectly on the Acropolis. The northern additions overlapped a shrine (*naiskos*) and altar, so after the construction was complete, the small temple-like structure was rebuilt directly above its location, placing it between the seventh and eighth columns from the east end on the northern side with a circular altar not farther away (Connelly 90). Since the Parthenon would be built larger to accommodate the statue of Athena, the platform would have to be configured to support such a building, especially considering the need for remodeling due to Persian fires that destroyed what little of the “Pre-Parthenon” that stood.

The exterior plan of the Parthenon includes forty-six large Doric columns with twenty flutes (vertical ridges along the shaft of the column), each averagely measuring thirty-four feet three inches high and a lower diameter of six feet three inches and higher diameter of four feet ten and one half inches (Anderson and Spiers 193-200). Seventeen columns

stood along the sides with eight at each end (counting the corner columns twice), modifying the normal six column style of the Doric order. Below the columns, the stereobate, or lower two steps, led to the stylobate, or top step. On the stylobate, the columns' shafts rose to the capitals of the Doric order. The entablature above the capitals and below the pediments includes the architrave just above the capitals and the Doric frieze with alternating metopes and triglyphs between the architrave and the pediments. Additionally, the Ionic frieze runs just inside inner porch around the Parthenon.

The interior plan of the Parthenon consists of four stages, beginning from the east end: the "front porch (*pronaos*) with six Doric columns, the 'hundred-foot' cella, or sanctuary proper (*hekatompedes naos*) [containing forty-six columns and housing the statue of Athena]; a separate back chamber, known in antiquity as the *parthenon* [the treasury room and believed to be the residing place of Athena containing four Ionic columns]; and a back porch (*opisthodomos*) [at the west end], also with six Doric columns" (Camp 75).

Walking into the two, perfectly balanced, seven and a half ton bronze doors, entering the *hekatompedes naos*, attention would immediately be drawn to the goddess Athena. Another one of the other major aspects of the room is the two-tier Doric colonnade format with ten columns along the sides and three columns in the back behind the statue of Athena, creating a backdrop. The architrave between the two levels of Doric columns (also with twenty flutes each) leads the mind's eye directly to the statue of Athena, especially when viewing from the doorway. These optical illusions would have been inherent in the smallest detail to shift all focus to the statue of Athena. Furthermore, windows were at the upper east end, providing more light to the statue and more than likely increasing the light for the large recessed reflecting pool at the floor in front of her podium.

Before the later title of "Parthenon" referred to the entire structure, it first referred to the smaller back chamber. Considered as the residing place of Athena—thus, *parthenon*—it was also used to store the treasury of the city's wealth. One of the most astounding features of this chamber is the four Ionic columns, as the markings on the original foundation depict their placement and base style. The Doric order having no base and the Corinthian not prominent yet, the Ionic columns are quite puzzling despite other Ionic elements in the temple. For logical architectural reasoning, the four Ionic columns chosen were the best choice for support, since Doric columns at that height would have been much too large for the smaller chamber and the two-tiered Doric colonnade too excessive for the small space. In order to access the *parthenon*, or the treasury room, one must

walk around the entire building and enter the same type of doors at the west end, as no part of the two chambers linked together until renovated as a Christian church.

Much is said about the Doric and Ionic orders used in the building plan. Though the Ionic columns in the *parthenon* were of best architectural choice, the inner Ionic frieze was optional. The double columned *pronaos* and *opisthodomos* and the bead and reel moldings of the Doric frieze crown are also Ionic features (Connelly 90). Noting that the Doric style was regarded as masculine due to its strength and bulk, and the Ionic as feminine due to its grace and thinner form, I believe that the binary is a large theme in the architecture, as it also possesses the binary theme of civilization conquering barbarianism. The world's most important icon contains elements advocating the harmony of masculine and feminine ideals. That is, the structure itself testifies to the role of gender in society, as both masculine and feminine ideals hold up the Parthenon.

The mathematical genius behind the Parthenon's architecture proves itself in the use of the nine to four ratio, also known as the Golden Ratio or Golden Proportion. The Golden Ratio is frequently used due to its visual appeal to the natural human aesthetics. Unifying the entire building, the Golden Ratio in the structure of the Parthenon lies most recognizably in the proportion of size between the *hekatompedes naos* and the *parthenon*. The size of the *hekatompedes naos* to the entire size of the structure, the length of the sides of the stylobate to the widths of the ends of the stylobate, the distance between each pair of columns to the diameter of each column at the base, and the width of the end of the stylobate with the height of the structure to the base of the pediments are all examples of the repeating ratio unifying the mathematical architecture.

However, the architecture cannot be purely focused on the math behind the form without considering the second unique feature of the temple and more important than the math itself— the refinements to the structure. The Parthenon is refined—or mathematically altered—in such a way that there is no straight line in the entire structure. The manipulations of the mathematical form are made possible by the Pentelic marble used. Giving life to the structure while providing a grand sense of strength, the refinements act as a conventional alteration of the form set up in the Golden Ratio, arguably representing beauty of the imperfect. Manipulating this form, “the Parthenon tips, slants, recedes, inclines, and bows, all the while transmitting an overwhelming sense of harmony and balance” (Connelly 94). Not only is this harmony and balance for structural and visual purposes, it embodies the essence of the goddess Athena's character in her

wisdom and strategy. Even though observers might be unaware of the refinements, mathematical conventions, and methods used, they are nevertheless “captivated by them” as Ernest Flagg comments (qtd. in Connelly 95). Additionally, Professor Percy Gardner states:

The whole building is constructed, so to speak, on a subjective rather than an objective basis; it is intended not to be mathematically accurate, but to be adapted to the eye of the spectator. To the eye a curve is a more pleasing form than a straight line, and the deviations from rigid correctness serve to give a character of purpose, almost of life, to the solid marble construction. (qtd. in Anderson and Spiers 119)

First noted and documented by Cockerell (1810), Donaldson (1818), and Hoffer and Pennethorne (1836-1837) and measured by Penrose in 1846, the refinements and their more recent study reveal the entire structure’s focus to Athena.

Beginning from the exterior and moving in towards Athena, the stylobate bows up at the middle roughly over two and a half inches in the center of the ends’ stylobate and bows up to roughly four inches for the sides’ stylobate with similar measurements mirrored in the base of the pediments and architraves. Upon ascending these steps, the Greek architects constructed the stereobate and stylobate at such a size and angle so that visitors must lift their legs at just the proportionate angle, shifting their weight as they lean forward to lift their body, causing them to bow to Athena merely in their ascent to her temple. More “refined” mathematics exist in the columns, not just at the top of the stylobate but on the *pronaos* and *opisthodomos* and in the *hekatompedes naos* and *parthenon*. Slightly curving outward at a convex curve up the shaft, the columns swell outward (an effect known as entasis) and do not appear equally distanced from one another. In addition, the columns at the corners are closer spaced to the other columns and are one-fortieth larger in diameter. All columns in the entire plan actually tilt inwards toward the center of the building measured at roughly two and five-eighth inches, which, if continued until an apex, would result in a pyramidal image rising just under a mile and a half in the sky for the side columns and almost three miles in the sky for the end columns, making the building seem taller and grander than it actually is (Anderson and Spiers 120; Kreyling et al. 129).

Walking into the *hekatompedes naos*, the patterns of the columns are uniquely repeated with the tilt and entasis, while the mind’s eye follows

the architrave between the tiered columns down to the statue of Athena. Though these are the more obvious refinements in the structure, each element, including the metopes and triglyphs, the pediment sculptures, and other various features, all repeat the alteration of mathematics, causing the building to naturally be the most iconic and beautiful building of all time due to its pleasing appearance to the eye. The level of accuracy in stone carving was a fine skill, and as Manolis Korres points out, one that

. . . would be impossible today to duplicate the perfectly constructed temple in the astounding time of eight years. This remains true even if gasoline-powered vehicles replaced animal-drawn wagons, or electric cranes were used instead of manually operated ones. . . . The greatest possible demands of refinement and accuracy occur during the final stages, in the preparation of each block, of each column, of each sculpted figure. (7-8)

Throughout the ages after its construction, the Parthenon received many alterations by dominating groups with the additions of walls and doorways and the majority of the structure was blown out. However, we can still measure and appreciate the mathematics and refinements that make the Parthenon so appealing to us.

The last major difference between the other temples and the Parthenon is the sculpture. The Parthenon has more sculpture and embellishment than any other Greek temple. Excluding the statue of Athena, there are three groups of sculpture—the Doric frieze, consisting of an alternating pattern of metopes and triglyphs; the continuous Ionic frieze; and the larger-than-life pediment sculptures. Under Pheidias, probably ninety sculptors worked on the Parthenon's embellishments.

Beginning with the Doric frieze, there are fourteen metopes on each end and thirty-two on each side with a triglyph in between each metope. Each handcrafted metope was probably completed individually on the ground and then raised into position. Each end and side represents a different narrative. The east end depicts the gods fighting giants; the south side depicts Greeks, more specifically the Lapiths from northern Greece, fighting centaurs; the west end depicts the Greeks fighting the Amazons; and the north side depicts the Greeks fighting the Trojans. The theme of civilization triumphing barbarianism weaves into the Doric frieze and thematically ties the frieze to Athena, as the goddess of wisdom and rationality. Recalling the history of the Parthenon, the Christians removed and defaced most of the east, north, and south, while others have been lost to time, so

we rely on historical records regarding their content. The British Museum possesses fifteen from the south side—the first eight from the western end of the south side and the last seven to the eastern end of the south side (Trustees of the British Museum 38).

The Ionic frieze just inside the outer columns runs five hundred and twenty-five feet around the entire structure, and its theme celebrates the Athenians and their Panathenaea celebration of the goddess. The position of the frieze, sculpted in place, is actually hardly seen by observers due to its recessed position, revealing the sculptors intended audience—the gods. The various elements sculpted for appreciation by human spectators were also all constructed in worship of Athena. The frieze begins at the southwestern corner and runs around the structure in both directions with detailed figures in procession—equestrians, chariots, elders, musicians, pitcher bearers, tray bearers, victims, maidens of the peplos, marshals, magistrates, deities, and the presentation of the peplos to Athena directly above the doorway to the *hekatompedes naos*, respectively (Trustees of the British Museum 22). Upon Lord Elgin’s visit to the Parthenon, this frieze was cast as well, and this cast resides in the British Museum.

Finally, the pediment sculptures focus on Athena in her birth on the east end pediment and her triumph over Poseidon for Athens on the west end pediment. It is important to associate the rising of the sun in the east with the birth of Athena depicted on the east pediment, so that, with each rise of the sun, Athena is reborn and crowned victorious. Much dispute over identifying the gods in the pediments exists for many of the figures. Not much historical literature and records exist on the pediment sculptures other than those that merely describe the narrative content of the two pediments and provide a brief description of placement of certain figures. However, due to developing research, educated speculations give us a clearer knowledge of the majority.

When the Board of Park Commissioners formed in 1901, the Exposition grounds were transformed into what we know today as Centennial Park. In 1920, a project from the Board planned a permanent reproduction of the Parthenon and chose Russell Hart as the lead architect. The permanent rebuild would include a more accurate exterior and an exact interior, since the interior housed only visual art at the Exposition. More research would have to be conducted and a permanent material discovered, since marble was far too expensive, an issue the Greeks never faced. Hart decided the best material was reinforced concrete, the latest development in materials, and covered it with “newly patented concrete aggregate formulated by the John Early Studio in Washington, D.C.,” which would be colored

to appear as marble and allow for red and blue trim (Kreyling et al. 127). Needing assistance with his research, Hart hired William Bell Dinsmoor, “the foremost authority on ancient architecture” (Kreyling et al. 127-128). The exterior of the Parthenon was completed in 1925, and the interior was completed in 1931. In every detail of the plan, the refinements, and the sculptures, the Nashville Parthenon is an extremely close replica. As Dinsmoor stated, “While there are several more or less faithful modern replicas of the exterior of the Parthenon, the only reproduction of the interior at full size is that which I designed in 1927 for the Parthenon in Nashville, Tennessee” (qtd. in Kreyling et al. 128). Needing further help in sculpting and designing, Hart hired George Zolnay, who sculpted the pediments on the Exposition Parthenon, to recreate the metopes, while hiring Belle Kinney and Leopold Scholz to recreate the east and west pediments. Both Belle Kinney and Leopold Scholz teamed with Russell Hart later to create the bronze doors (Paine et al. 28). Once created, the large doors were brought into the Nashvillian Parthenon on ice because of their weight and placed on the hinges. The ice melted, and the seven and a half ton doors with lion medallions and serpent door handles were mounted accurately. Additionally, the tilt and entasis of the columns, the convex curves in the stylobate, and all other refinements and features are reproduced accurately. Even though completed in roughly the same period as the Athenian Parthenon, the Nashvillian Parthenon used different materials, already had templates and casts, and, when opened in 1931 A.D., most importantly lacked the statue of Athena and the Ionic frieze.

Another parallel in the structural history between the Athenian Parthenon and the Nashvillian Parthenon is that the Nashville Parthenon had connections to Christianity from 1954-1967 A.D. True Nashvillians would agree that a discussion of the Parthenon in Centennial Park is unsatisfactory and incomplete without the Christmas tradition of the Harvey Nativity Scene, owned by Harvey’s Department Store. Two hundred and eighty feet long by seventy-five feet wide, glossed with multicolored lights, music, and narrative of the Christmas story, the Nativity Scene decorated the lawn next to the Parthenon. Many local families have had life-long memories of visiting “the main attraction in Nashville at Christmastime” (Judkins). However, in 1968, the Nativity was damaged beyond what the Harvey’s Department Store could afford to repair, so the collection was bought by a Cincinnati shopping center. To the dismay of Nashvillians by word through the *Nashville Banner*, the Cincinnati shopping center displayed the collection for two years before disposing of the set.

In 1990, minor renovations were required to maintain the sculptures

and the structure, including the lower level office additions, the elevator, gift shop, and other similar additions in 1988-1989. With these renovations complete ten years later, the Parthenon was ready to celebrate the centennial of the Board of Park Commissioners in 2001 (Paine et al. 40-42). Due to an accurate replication, entering the Nashville Parthenon and standing at the doors of the *hekatompedes naos*, the same visual effect is achieved by the exact replica of measurements from the original—the entire structure’s focus on Athena.

The Parthenon and Athena: The Centerpiece and Its Meaning

The most important aspect of the entire Parthenon is not the architectural features or the magnificent outer sculptures; it is the statue of Pallas Athena in the *hekatompedes naos*. The heart of the Parthenon, the statue of Athena, Pheidias’s chief masterpiece, is the stunning culmination of every aspect the building, as presented. Unfortunately, not a lot of information exists about the original sculpture of Athena. Pausanias describes:

The statue itself is made of ivory and gold [chryselephantine]. On the middle of her helmet is placed a likeness of the Sphinx . . . and on either side of the helmet are griffins in relief. . . . The statue of Athena is upright, with a tunic reaching to the feet, and on her breast the head of Medusa is worked in ivory. She holds a statue of Victory about four cubits high, and in the other hand a spear; at her feet lies a shield and near the spear is a serpent. The serpent would be Erichthonius. On the pedestal is the birth of Pandora in relief. [Pausanias continues to describe the Pandora relief with a hero and emperor present in the relief.] (24.5-7)

With a core of a wooden or metal armature and brace, Athena stood over forty feet high in the *hekatompedes naos* holding a six-foot Nike in her right hand, both ivory-skinned and adorned in golden clothing with precious stones for eyes. Many depictions of a similar image are found around the same time and later in the Roman Empire than can allude to what she might have looked like. The statue of Athena went missing sometime between the first and third century A.D., though most scholars assert that she was removed or destroyed in the fire around the third century A.D., possibly as a result of the Herulian invasion of Athens (Camp 223). This theory is supported by Pausanias’s record, as he is writing in the second century A.D. using present tense to describe the statue of Athena within the Parthenon.

Concerning the serpent, Erichthonius symbolizes the image of the “Great Goddess” figure throughout classical mythology. Athena’s association with the serpent at her feet is no coincidence but a continuation of this Greek idea. Here the serpent is believed to symbolize the Athenians’ protection and origin with Athena. The role of women in mythology repeats in the birth of Pandora relief, the head of Medusa, the sphinx, and the masculine Doric order and the feminine Ionic order—another example that all elements are combined in the statue of Athena, as she becomes the center and culmination of all ideas introduced in the architecture and sculpture.

Regarding Athena’s shield, some myths account the placement of Medusa’s head on her outer shield, so it is also possible Medusa’s head might have reoccurred there. Further information concerning the nature of the statue and her shield lies with Plutarch when discussing the trial of Pheidias, who was charged with heretical acts of placing his and Perikles image with the gods in the shield:

But the reputation of his works nevertheless brought a burden of jealous hatred upon Pheidias, and especially the fact that when he wrought the battle of Amazons on the shield of the goddess, he carved out a figure that suggested himself as a bald old man lifting on high a stone with both hands, and also inserted a very fine likeness of Pericles fighting with an Amazon. And the attitude of the hand, which holds out a spear in front of the face of Pericles, is cunningly contrived as it were with a desire to conceal the resemblance, which is, however, plain to be seen on either side. (*Pericles* 31.4)

In *Pericles* 31.5, Plutarch says that Pheidias was led away to prison, where he later died of sickness, though some believe enemies of Perikles poisoned him. On the outside and inside of her shield, the civilization conquering barbarianism theme is repeated in closer association with Athena, unifying this theme of the Parthenon with the statue of Athena and ultimately Athena herself.

As the “Great Goddess” embodies life, death, and rebirth, so Athena is reborn in Nashville, Tennessee, despite her absence from the Parthenon for many centuries. After the Nashvillian Parthenon’s opening in May 1931, Belle Kinney and Leopold Scholz returned and approached the Board of Park Commissioners with plans to complete the structure with the missing Ionic Frieze and sculpture of Athena. The finances were not available, though the miniature four-foot sculpture they presented lived in the Parthenon thereafter. Thirty years later, “Sometime in the late 1960s a

donation box appeared next to Belle Kinney's model in the middle of the Parthenon. School children, visitors, and Nashvillians put their nickels, dimes, and dollar bills in that box over the next twelve years" (Kreyling et al. 133). Thirty thousand dollars were raised by 1982, enough to begin the program. After emerging victorious in the sculpting competition for the position in the program, twenty-six year old Alan LeQuire began researching. He speculated a period of eighteen months for the project; however, it took over seven years (Kreyling et al. 133). Unveiling the sculpture in May 1990, *Athena* was complete with the pedestal, the statue of Nike, the spear, the shield, and the serpent. *Athena* and Nike were later glazed with twenty-three and three quarter karat gold in 2002, with LeQuire and Master Guildler Lou Reed (Paine et al. 45). Also during this time, the skin was painted to resemble ivory and the inside of her shield to depict the battle of the gods and giants.

Interpreting his research to the best of his ability, Alan LeQuire received much guidance to create the most accurate replica of a statue that had not existed in over seventeen hundred years. Coming to conclusions such as the leg-weight shift position, similar to the contrapposto position, and analyzing the different effects of weight shift, he further discovered that a simple wooden beam placed through *Athena*'s arm could easily bear the weight of the six-foot Nike. Following Dinsmoor's measurements and speculations, LeQuire's *Athena* measures forty-one feet and ten inches tall. After completing drafts of his *Athena*, he also had to plan a fifteen-foot shield with thirty-one figures in the Amazon relief, twenty-one figures on the pedestal for the birth of Pandora, and a thirty-foot serpent (LeQuire 143).

Taking some liberty in his design, LeQuire inherited the spirit of Pheidias by creating perspective distortions and culminating themes introduced in the architecture. First, LeQuire created larger proportions such as her slightly larger head while her upper body decreases in proportion as her figure nears the base, so that her arms would almost touch her knees if placed at her side. These visual alterations, when viewed from below, make *Athena* look equal in proportion as she rises to the ceiling of the *hekatompedes naos*. Noting the design of the architrave between the two-tiered columns and its effect on the mind's eye, he also places *Athena*'s right hand holding Nike at the same level intensifying that focus on *Athena* and the crowning of her victory.

Second, LeQuire ties in the civilization conquering barbarianism theme and the "Great Goddess" theme in his reliefs and embellishments on *Athena*. On the exterior of *Athena*'s shield, LeQuire depicts the famous

battle between the Greeks and Amazons, including Pheidias and Perikles. On the interior of her shield, he recreated the battle between the gods and the giants. Lastly, on her sandals, he depicts the battle between the Lapiths and the Centaurs. All three recreate the metopes, excluding the Greeks battle with the Trojans, and establish the binary theme of civilization triumphing barbarianism with *Athena*.

Furthermore, as Athena's belt and adornment on her breastplate and wrists, LeQuire sculpts serpents. As the symbol of the "Great Goddess" figure, the serpents parallel those from the bronze door handles and Erichthonius by her side. Lastly, officially modeling himself after Pheidias despite his trial and persecution, LeQuire created Pandora's birth scene with himself in the relief with other friends, family, and others involved in recreating Athena. Adding a unique American touch, LeQuire also transformed a McDonald's flagpole into the mighty spear of the goddess, another symbol of her American rebirth.

Though he does not consider his educated interpretation to be faultless, he thinks that his style might bear some resemblance to Pheidias. He also considers *Athena* to be a "Lady Liberty, a living symbol of justice and democracy" (LeQuire 144). Comparing *Athena* to the Parthenon like a kernel to a shell, he thinks that he has given meaning and spirit to the monument (LeQuire 144). Transformed from a focus of worship, Athena's rebirth in Nashville represents the continuation of a skilled, determined culture now known as the "Athens of the South."

A Recapitulation

One of the most iconic structures of all time, the Parthenon represents the epitome of civilization. Journeying through its powerful history, analyzing the structural form, and examining the heart of the Parthenon, Pallas Athena, through the Athenian and Nashvillian Parthenons, this cultural civilization reaches its height in the Golden Age of Athens, Greece, declines, and is reborn in Nashville, Tennessee. Carrying the connotations of the Greeks' culture and civilization in the Athenian Parthenon, the Nashvillian Parthenon transforms from a temple of worship to an icon of a refined culture—the "Athens of the South." Though many argue that the title of "Athens of the South" is due to Nashville's history of classical education, I further argue that the education and the ideal for art are the representations of culture. This culture is defined by its determination to achieve a refined, civil society and the best civilization possible by means of democracy. As the original Parthenon carried these political connotations, so does the replica in Nashville.

Many other parallels include the historical building process, the celebration of patriotism, the display of power, the themes of civilization conquering barbarianism, and, most importantly, the cycle of the “Great Goddess,” as Classical Greek culture is reborn in Nashville. The Parthenon represents in every measurement and detail the Athena within, and the Athena within carries meaning that surpasses all other cultural achievements. The Parthenon does not merely exist to be appreciated and studied as a representation of an ancient people; it exists as a representation of today, while modelling a future of tomorrow.

Words cannot adequately capture the experience of walking among the large columns, touching the large bronze doors, enjoying a marionette production of Socrates’ “Allegory of the Cave” on a Sunday afternoon in the *parthenon*, and gazing awestruck at Alan LeQuire’s interpretation of the work of Pheidias due to the recreated optical refinements. I urge all to experience the Parthenon in Nashville physically. Even though Greece might be on the opposite side of the globe from Nashville and the ancient culture written in history, Nashvillians can look within local culture and find that Greek culture is not as distant as first thought. Absorbing the Nashville replica of the Parthenon will be an experience one will never forget and will cause one to examine oneself and Nashvillian culture in an entirely new way. We must not forget our roots; we must not forget what we have inherited and that which is reborn and refined in each of us, dwelling in our core as Athena dwells in the Parthenon. Just as the Parthenon and the statue of Athena was “created in a short time for all time” (Plutarch, *Pericles* 13.3), the underlying civilized culture, “intellectual, pure, progressive, and just, constantly at war with the opposing forces of barbarianism” (Kreyling et al. 135), is reborn in us. Therefore, as the sun breaches the horizon once more and shines down upon us, it births a refined cultural identity that transcends yesterday, today, and tomorrow.

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