

River Scenes at the Tennessee Aquarium

Sculptor

Concept

Text and Script

Research Fabrication

Architects

Sponsor

Claire Nivola

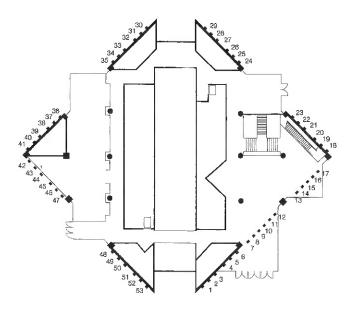
Peter Chermayeff

Sherry Kafka Wagner Barbara Meyer

Skylight Studios

Cambridge Seven Associates, Inc.

Alice P. Lupton



The medallion numbers shown in the location key plan above correspond to the page numbers of this booklet.



Introduction

The building's exterior walls presented an opportunity to integrate artwork with the architecture, to both enrich the facades and to reinforce the Aquarium's interior exhibition of habitats and animals. A linear timeline focused on the Tennessee region could be developed as a necklace of pearls, each a vignette of the river's history.

Italian Renaissance bas-reliefs were the source for this idea, particularly the biblical stories told in bronze by Ghiberti in Florence. To develop the work an appropriate artist had to be found. It occurred to me that Claire Nivola would be equal to the task. An American artist, Ms. Nivola had not worked before in bas-relief, but her talents and lifelong exposure to the work of a master—Costantino Nivola, her Sardinian father—had given her a sophisticated understanding of the medium.

Expertise in Tennessee history was necessary to give structure and balance to the timeline, to identify important stories, themes, and events, and to find visual reference material as potential inspiration to the artist. Consulting with many people steeped in Tennessee history, writer and museum consultant Sherry Kafka Wagner undertook the research, with the assistance of her associate, Barbara Meyer. We are grateful to the many who helped, particularly Dr. Nicholas Honerkamp, Chief Jonathan L. Taylor, Dr. Charles Hudson, Ms. Clara Swann, Mr. Carson Camp, and Ms. Deborah Jean Warner. Guided by experts in history and local lore, the search in libraries throughout Tennessee and the nation yielded stories to illustrate and suggested many extraordinary images.

The timeline addresses such themes as myths, rituals and lifestyles of the Native Americans, the arrival of the Europeans, the coming of new settlers with their own myths, rituals, and lifestyles, new claims and settlements, changes in the land and river, displacement of the Native Americans, the growth of new industries and transportation, problems deriving from overuse of the land, the creation of TVA to deal with those problems, the river's present life and a hint of the future.

We hope that Claire Nivola's fifty-three medallions, the result of this collaboration, will suggest the many layers of the past that can be peeled away by any one inclined to examine the rich heritage of this river valley.

Peter Chermayeff



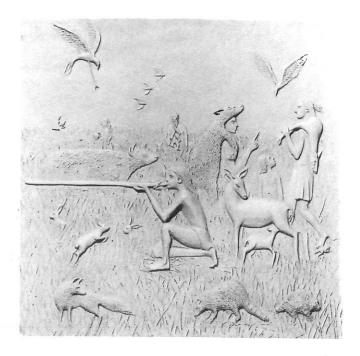
In the mountains that give birth to the Tennessee River, the Cherokee live and tell stories of how the place came to be. In the beginning, says one story, all the animals dwelled "beyond the arch" in a crowded place. Longing for a new home, they sent Waterbeetle to find what was below the water. He brought up mud which grew into a large island, fastened to the sky by four cords. The land was soft, flat, and very wet. Anxious to inhabit this place, the animals sent different birds to scout for dry land, but time after time the messengers returned to say there was no place where a bird could land. Finally, the Great Buzzard flew forth. He flew and flew and flew, finding nothing but soft ground. He flew so long that his great wings grew tired and began to droop. They struck the yielding earth and pushed it upwards, forming great mountains. The watching animals feared the tired bird would sweep the whole world into mountains, so they called him back. But Great Buzzard's wings had shaped the earth where the Cherokee came to dwell.



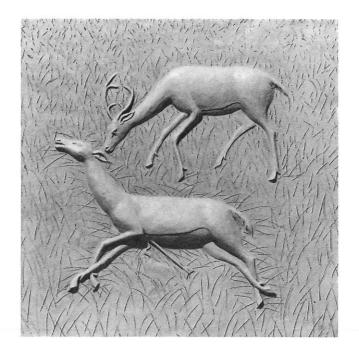
The Cherokee knew the Tennessee River as Yû'ñwi Gûnahíta, the Long Man. This giant had his head in the foothills and his feet down in the lowlands. In Cherokee rituals, the Long Man holds all things in his hands, pressing relentlessly forward, never stopping, bearing all before him. The Long Man speaks in murmurs which only the priest may interpret. Invoking Long Man with fasting and prayer, the People honored him on important occasions, seeking his aid in such human concerns as hunting and fishing, love and war, birth and death. Long Man stretches through the land, always moving, always speaking in a language only the blessed can decipher.



Mighty winds blew their cold breath across the land, and the animals suffered. There was no warmth anywhere. Then the Thunders sighted a hollow sycamore tree on an island in the river and sent their lightning to sear its center. The shivering animals sighted smoke winding from that treetop and held a council to determine how to capture the tree's heat. Certain animals tried. Raven flew down close to the tree and was scorched black. Turned back by a fiery blast, Screech Owl wound up with red eyes. Hooting Owl was nearly blinded by smoke and still has white rings round his eyes. To this day Black Racer Snake darts and doubles back, in motions that recall its narrow escape from the searing coals. Finally Waterspider came forward. Since she could run on top of water as well as dive to the bottom, she offered to go. When Waterspider reached the island she spun a thread, wove it into a bowl, and with it, scooped a coal from the fire. She carried this burning coal back across the water in her bowl, and since that day The People have had fire.



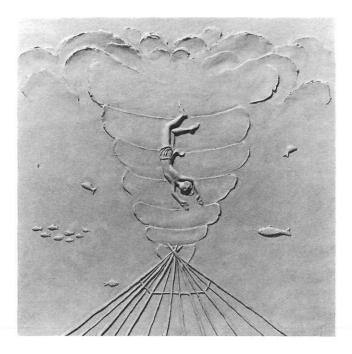
At first, all creation lived together in peace. Plants, animals, and humans spoke one language. But people began to multiply, spreading through the land and crowding the rest of creation. They began to kill animals with reckless carelessness. In defense, the animals called a council to consider how to restore balance in the world. They decided that each animal species would be capable of inflicting one particular illness on people, thus preventing mankind from crowding them out of existence. Now the once peaceful world became a place of separation. Men hunted animals; animals spread illness. Understanding between all living things was destroyed.



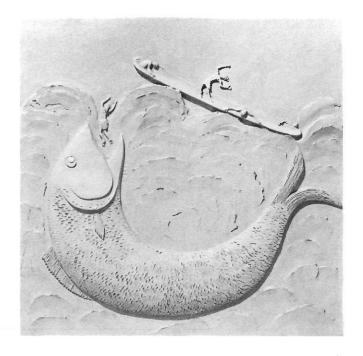
Deer, exalting in their swiftness, invented a disease that would rob man of his ability to move quickly. The deer sent word to the People: unless a hunter asks pardon for the offense of killing a deer he will be afflicted with rheumatism. Little Deer, swift as the wind and unable to be wounded, was sent to watch over the hunting grounds. When a deer is slain, Little Deer runs to the site, bending over the bloodstains and asking the fallen deer if he heard the hunter's prayers. If the answer is no, Little Deer enters the hunter's home and strikes him with illness. The man becomes crippled, never to hunt again.



When the earth was new, all creation was asked to keep a seven day vigil. Only a few were able to do this, the evergreens and the owls among them. For this vigilance they were granted special powers. As the world fell into disharmony and animals took vengeance upon people by spreading ravaging diseases among them, the plants felt pity for suffering humanity. The plants offered people their special powers to cure illness and ease pain. The powerful evergreens and other plants placed themselves at the service of mankind, helping people in their distress.



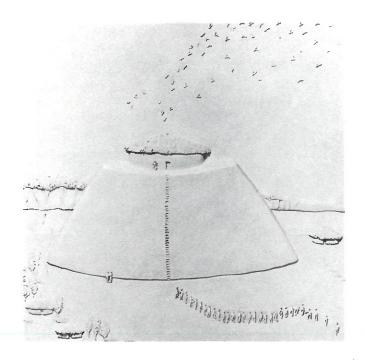
On the Tennessee River eight miles below Chattanooga is a place called the Suck, a series of whirlpools which erupt intermittently. To the Cherokee, this was the place where two men were suddenly dashed from their canoe and drawn into the whirlpool. One was swallowed by a huge fish, but the other swirled relentlessly downward until he reached the bottom. Suddenly the water opened below him. He could see through the roof beams of a large house. A great company of people was gathered there, beckoning to him. But before he fell into those grasping hands the current caught him once again, whirling him up and out, finally pushing him into the shallow waters of safety.



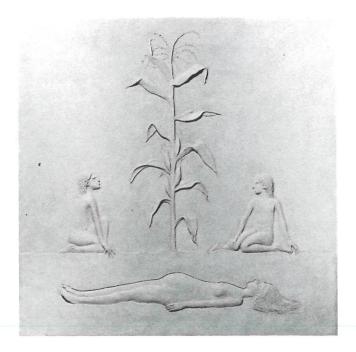
Where Toco Creek flows into the river above the mouth of Tellico, there lived a great fish called the Dakwa. One day a canoe carrying Cherokee warriors was making its way downriver when the Dakwa rose under the boat, throwing the men into the air. As they fell into the water the great fish swallowed one man, then dove to the river bottom. Inside the fish's belly the intrepid warrior discovered some mussel shells and began to cut his way out. Smarting with pain from these wounds, the Dakwa rose to the water's surface and the man escaped. But the warrior bore the sign of his ordeal. The fish's stomach juices had scalded his head; he was bald the rest of his days.

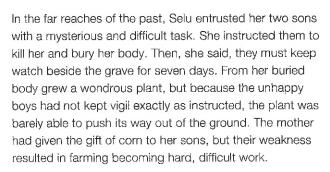


In the wild depths of the Great Smoky Mountains between Tennessee and North Carolina lies the enchanted lake known to the Cherokee as Atagahi. Only the animals can see this lake; only they know the way to its shores. Should a stray hunter happen upon the take by accident, he would see only a dry flat space without bird, animal, or blade of grass. But if the seeker first prepared his spiritual vision by prayer, fasting, and all night vigil, he could see a wide, shallow sheet of water brimming with fish and swimming reptiles while great flocks of ducks and birds floated on its surface or circled in the air above. Animal tracks line the shores for Atagâ'hi is the animals' medicine lake. If a wounded creature makes its way here and plunges into the water, it will emerge healed. Because the lake has these sacred powers the animals keep it invisible, hidden from ordinary human sight.



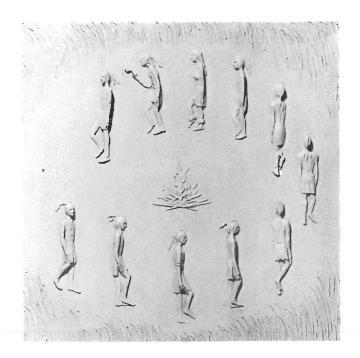
Throughout Tennessee early peoples built temple mounds, flat-topped pyramid structures with a grass-roofed building on the summit. Some of these sites were located at Chucalissa near Memphis, at Savannah/Pittsburg Landing (which was the site of the Civil War battle of Shiloh), at Hiwassee Island, at Dallas Island (now submerged under Chickamauga Lake), and in Chattanooga at the place where Citico Creek joins the Tennessee River. During the Civil War, Citico Mound was used as a rest spot for troops. A tunnel was dug into the mound but the sound of the cannon celebrating Lee's surrender caused the tunnel to collapse. Amateur investigators continued to explore the site until it was demolished in 1915 to build Dixie Highway, which later became Riverside Drive.



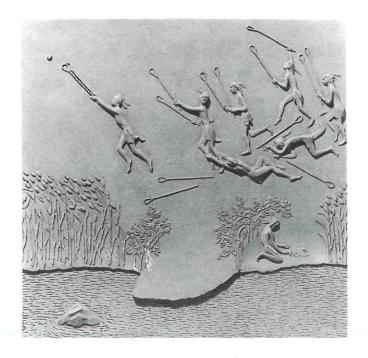




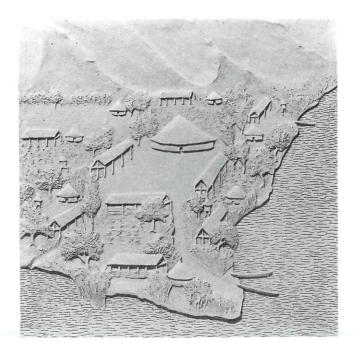
Kanati was a great hunter who always brought home deer. His ambitious young sons, eager to learn the secret of his hunting success, followed him into the woods. There they saw him push aside a rock covering the entrance to a large cave. One deer escaped and Kanati quickly felled him. Made bold by their knowledge, the boys decided to emulate the great hunter. A few days later they approached the cave and, with much effort, pushed aside the rock. Out came one animal, then another and another. The boys struggled and tugged, but they could not roll the rock back into place. All the animals darted out to freedom, quickly scattering into the forest. Because of these impetuous sons, hunting became a difficult and demanding skill.

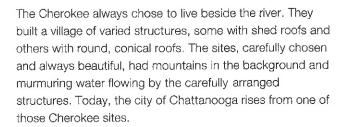


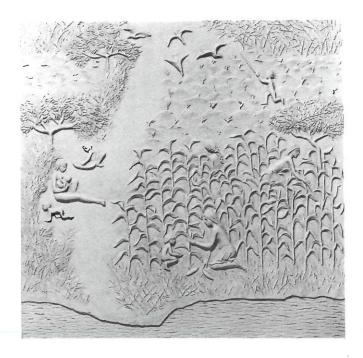
For the Cherokee, the sole purpose of war was to avenge a death. Before a war party went forth to battle, the braves undertook purification rites such as the dance shown here. A warrior wearing a snake mask leads a single file of dancers in a counter-clockwise pattern of movement. He is followed by the Singer, then comes a woman wearing turtle leg rattles. The other warriors follow behind her, imitating animals in their movements. This helps them acquire the swiftness and stealth of animals, abilities that allow them to surprise their enemies. By waging a retaliatory war the warriors restore balance to the cycles of life and death.



The ball game was an important part of Cherokee life. The players trained diligently, bathing in the river as part of the preparation rites. The men were led to the playing field by the shaman who chanted prayers and sacred incantations. After a game played with sticks much like those used in lacrosse, the players again "went to the water". The ball game was an important activity which reminded the People of the great ball game between the animals and the birds when a mighty thrust sent the ball flying into the air. It hung in the sky and became our moon.

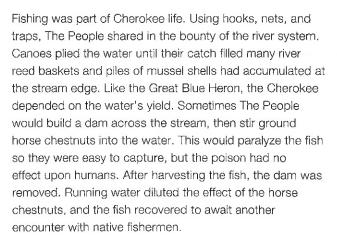






In Cherokee society, both women and men held important positions and had serious responsibilities. The women were primarily responsible for agriculture, farming large communal fields in the fertile river valley just outside the village. Here, beans were cultivated to twine round the cornstalks while squash, pumpkins, and sunflowers grew between the plants. Stone implements and pointed digging sticks were used, and older women helped by scaring away the birds. At harvest time, the women presented the crop to the village in the important and impressive Green Corn ceremony.

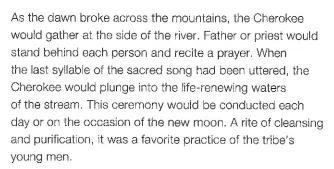






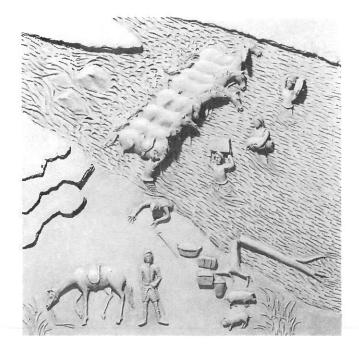
When a Cherokee baby was four days old, a priest carried it to the river to conduct the Long Man rites. The holy man faces the rising sun and, reciting a prayer, bent seven times toward the water, establishing the bond between the child and the river. Then the infant was handed back to the mother who rubbed its face and breast with water dipped from the stream. With this ceremony a new soul was launched on its earthly journey.

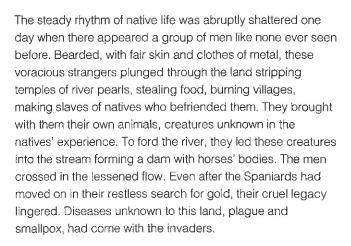


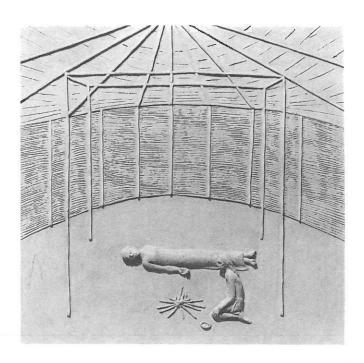




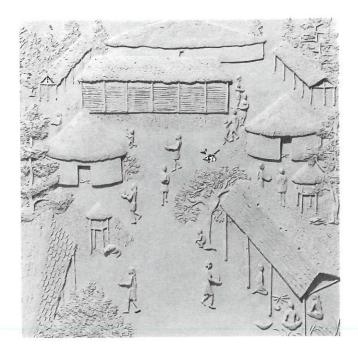
The People observed animals closely, admiring some animal traits so much they wished to acquire them. Certain practices helped achieve these bonds with animals. If a woman's hair was braided with eel skin it would grow longer. Scratching a child's palm with crayfish would impart a strong grip, while scratching the tongue with cricket would give the gift of melodious speech. By rubbing his body with eel skin, the ballplayer intended to be slippery in the game. In the Cherokee world view, animals have superior powers because they predate mankind. However, by practicing certain sacred rites, people may cross the boundaries separating man from animals and share their special qualities.

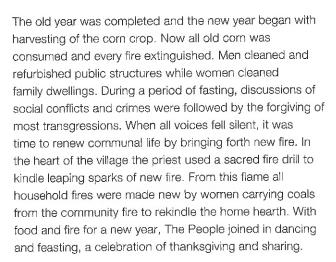


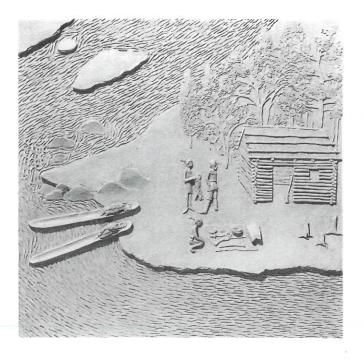




As the soul leaves the body in death, the Cherokee believe there is danger that a witch could claim it in an effort to extend his time on earth. For this reason, a shaman sits all night beside the body tending the fire and invoking its aid in detecting approaching witches by dropping in pinches of tobacco and reciting chants. All night the shaman waits, listening and singing. He listens to hear the call of raven, hawk, or owl signaling the witch's approach. He sings to guide the spirit safely on its way.







After the gold-crazed DeSoto expedition had come and gone, the native peoples had about one hundred years before white men came again to the river land. In 1700 Jean de Charleville established a trading post on the Cumberland where animal pelts were exchanged for such European goods as guns, powder, clothing, knives, blankets, scissors, salt, kettles, looking glasses, and liquor. Fascinated by trade, the native people came to depend upon these goods. The botanist William Bartram observed, "The white people have dazzled their senses with foreign superfluities." As the purpose of hunting shifted from foodgathering to profit, the wildlife slaughter began.

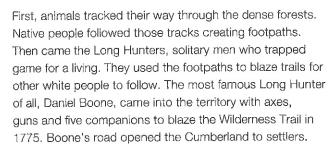






Quaker William Bartram, a naturalist, was commissioned by Dr. John Fothergill of London to travel into these lands, not to trade but to study. In 1773 he embarked on a four-year expedition through the Carolinas, Georgia, Alabama and Florida to the Gulf of Mexico. In his book, *The Travels of William Bartram*, he documents his appreciation of the land and fauna and the native people he encountered. In the woods he discovered azaleas, lilies of the valley, dogwood. He wrote of steep rocky hills and cascades of clear water. When he met the Cherokee leader, Attakullakulla, he discovered that the People shared his reverence for plant life and respect for the natural environment. The Cherokee possessed great knowledge of their land and its plants, and they generously shared this learning with Bartram.

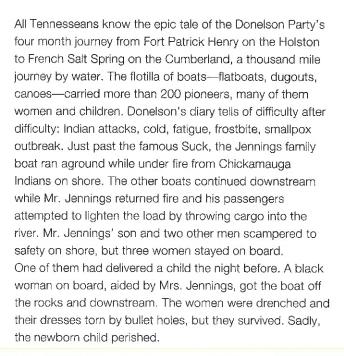






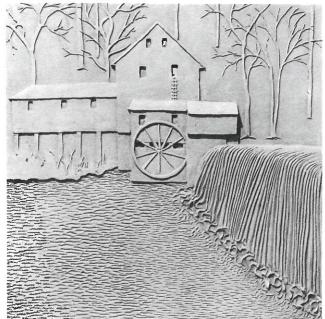
White men saw land as a commodity that must be surveyed, measured and mapped in order to establish property rights. To make a survey one man would sight along a compass on a Jacob's staff while two men laid a sixty-six foot chain in a direct line to a mark. A fourth man recorded the data in a notebook. As the newcomers felled trees and plotted the land, Dragging Canoe, a Cherokee leader, predicted, "You have bought a fair land, but there is a cloud hanging over it. You will find it dark and bloody." The white man's vision was different. To him, "taming" the land was a God-given duty.

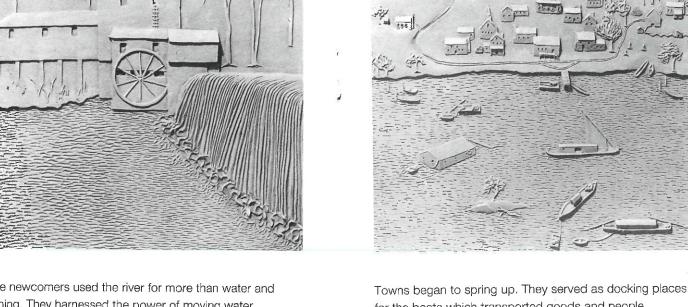






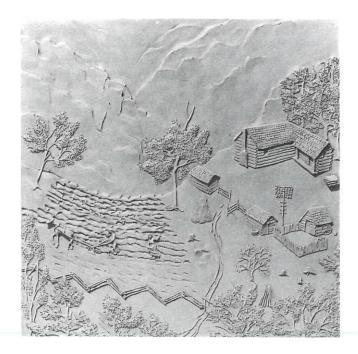
Settlers changed the land. They brought new tools into this place they called the wilderness and used their axes, saws, and plows to fell trees for houses and clear plots for farming. Unlike the native peoples who preceded them, these newcomers did not live in communities, but built separate homesteads where each family, including the children, worked diligently to establish a new home.

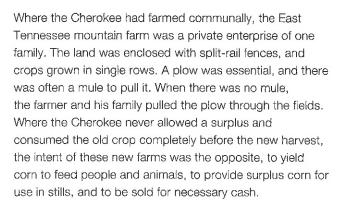


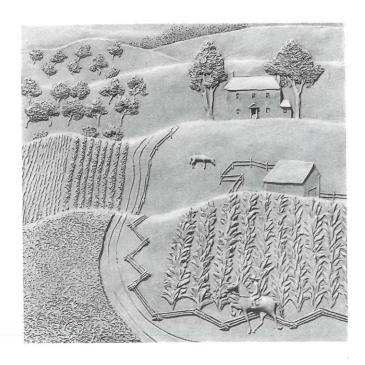


The newcomers used the river for more than water and fishing. They harnessed the power of moving water, employing its energy to run grist mills for grinding corn and other grains. Not only was this method more efficient, it allowed the production of a surplus for sale and/or trade. Soon water-powered sawmills produced lumber for use in construction. This quicker, more efficient building material facilitated the growth of towns and allowed settlers to build large structures such as churches and courthouses. Simple and relatively clean, these mills introduced the first use of water power in the region.

Towns began to spring up. They served as docking places for the boats which transported goods and people along the river highway and functioned as necessary supply centers for the scattered farms and homesteads. In these fledgling communities, the church spire and the courthouse tower often rose above the other buildings, dominant symbols outlined against the sky just as temple mounds had stood above the old riverside communities.

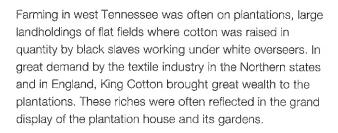






In the rolling bluegrass country of middle Tennessee, the fields were wider and larger crops were grown. These prosperous farms often centered around a large house sited in a grove of trees. Tobacco, a good cash crop, was grown and hung in barns for curing. Here, breeders developed the famed Tennessee walking horse.

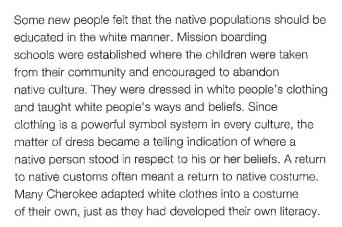


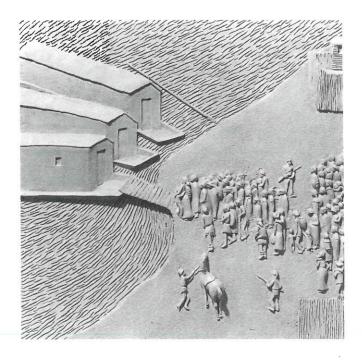




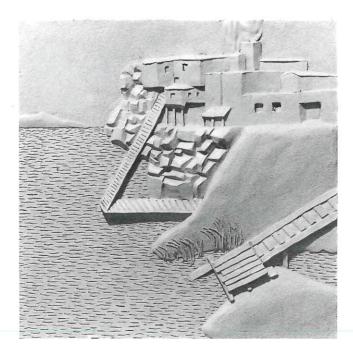
The native peoples dealt with the influx of newcomers as best they could. They negotiated treaties that were soon abrogated. They fought, only to be overwhelmed. They attempted to learn and adapt to the white ways, hoping to share in the new order. To help his people cope with the changes, the brilliant Sequoyah developed a written language for the Cherokee and brought them to literacy. This difficult time of confusion and turmoil is exemplified in the story where a white and a Cherokee meet and sit together on a log. The white man keeps edging over, pushing the other man closer and closer to the end. Finally the Cherokee finds himself forced from the log altogether. "I can't sit anymore," he says. "I suppose this is what will happen to us." To the native people it was obvious they were being pushed from their homeland.

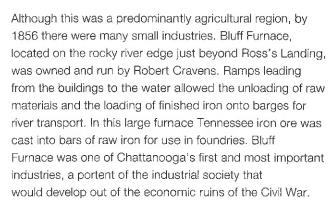


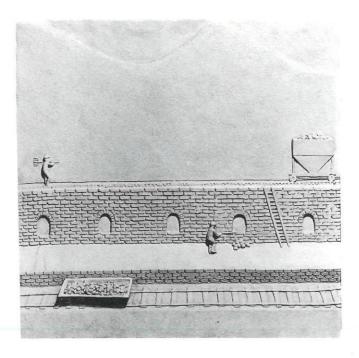




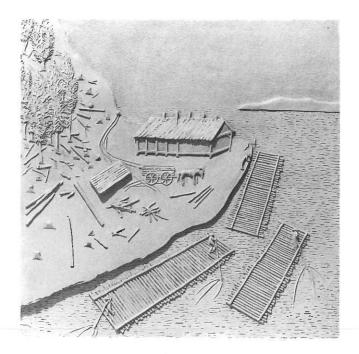
The attempt to adapt to white man's ways did the Cherokee no good. In 1838 these people who lived in houses and farmsteads, who wore the same clothes as their oppressors, who had learned to read and write and had established their own newspapers, who had embraced the American democratic government and its justice system, these men, women, and children were rounded up at gun point by American soldiers. Here at Ross's Landing where the Aquarium now stands, these unfortunate victims were held in stockades, then herded onto flatboats for the journey downriver. This was the beginning of the infamous Trail of Tears, the long and painful forced march to Oklahoma. The Cherokee had worked hard to adapt to white ways. According to the 1828 census, they had accumulated property worth two million dollars. Their property was confiscated. Fourteen thousand people were removed; more than a fourth died on the trail. A few escaped into the mountains to become the Eastern Band of Cherokee.

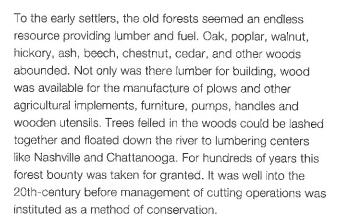


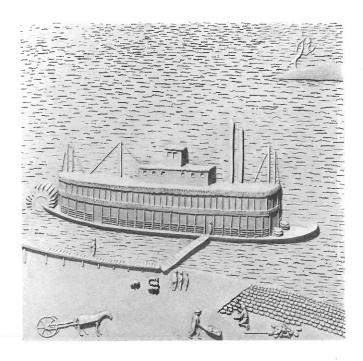




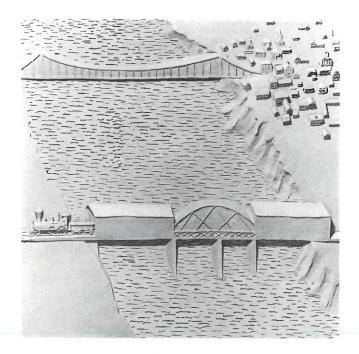
Because the land held valuable mineral deposits, such as copper and coal, quarries and strip mines developed. Coal could be mined and used to produce coke for the production of steel. Dug from underground veins, the coal was transported to large ovens to be turned into coke. These log-fired ovens consumed much timber. Because there was a plentiful supply from the large forests, the industry flourished. A number of companies sprang up, such as the Tennessee Coal, Iron, and Railroad Company, Rockwood Mines owned by Roane Iron Company, Etna Mines at Raccoon Mountain, Soddy Coal Company, Alden's Ridge Coal Company and others. With the advent of mining, the release of industrial waste into air and water and land had begun.

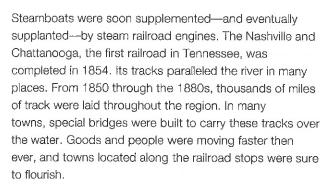


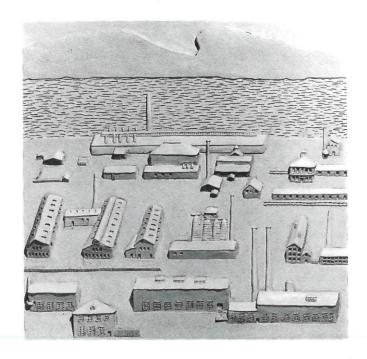




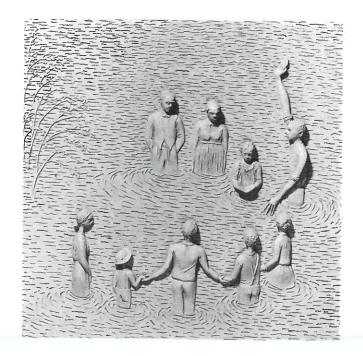
Rivers are moving pathways through the land. From earliest days, people made use of the water to move themselves and their goods from place to place. The Tennessee River presented certain navigational problems because of the rapids at Muscle Shoals, the long meandering path to the Mississippi, and the lengthy northward bend to the Ohio. Nonetheless, sternwheeler steamboats carried passengers and cargo on the Tennessee, docking at cobblestoned wharves like the one that was located here at Ross's Landing.

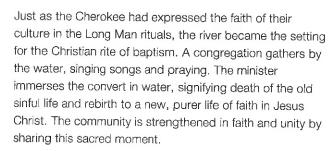


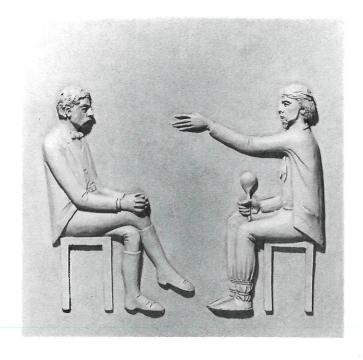




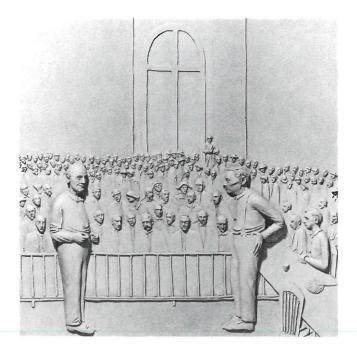
The church spires and courthouse towers of earlier days were joined by a new silhouette rising on the skyline: smokestacks. Industries grew along the riverside since water allowed barge access and carried away waste products. Smoke from the industrial towers mingled with the mists of the mountains as workers came to live in the towns, many of them leaving farming to find a new way of life in the factory.



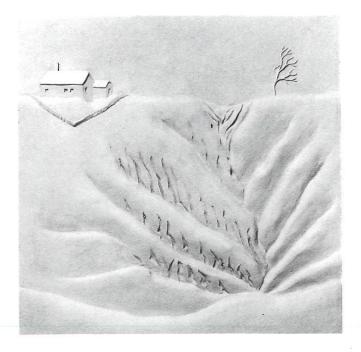




As William Bartram had a century before him, James Mooney traveled to the East Tennessee mountains seeking knowledge. Sent by the Smithsonian Institution in 1887, he wished to learn from the Eastern Band of Cherokee about plants and plant lore relating to medicinal practice. The young man of twenty-six encountered Swimmer, an A yun ini (priest, doctor, keeper of tradition) in his fifties. Swimmer spoke no English; Mooney spoke no Cherokee. With the help of an interpreter, the elder man began to instruct the younger. Thanks to Sequoyah's Cherokee Syllabary, the People had notebooks containing formulas, songs, prayers, instructions for ceremonies, and information about pre-contact religion. Swimmer presided at Green Corn Festivals, ceremonial ball games, and other tribal functions. He shared his knowledge and experience with Mooney and encouraged others in the tribe to do so. Mooney developed great respect for the native knowledge and cultural forms and urged that they be encouraged and saved.

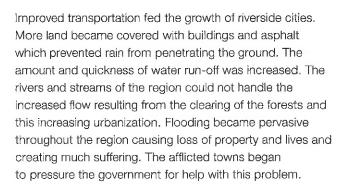


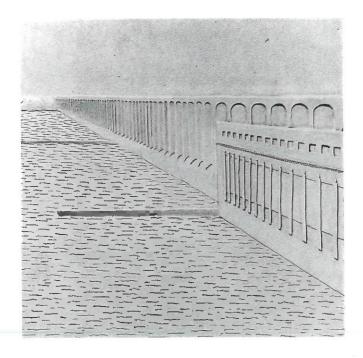
Conflicts concerning beliefs about man and nature were not confined to clashes between cultures. In 1925 the famous Scopes trial was held in Tennessee, trying a schoolteacher for presenting the theory of evolution. William Jennings Bryan argued that the Christian creation beliefs detailed in the Bible were the only valid understanding of nature while Clarence Darrow defended the accused man's right to scientific theory. Reports on the trial were conveyed throughout the nation and the world by radio, newspapers, and telegraph. The impact of new communication technology was dramatically illustrated as this Tennessee trial became a momentous occasion in national and world history. The Tennessee anti-evolution law was upheld.



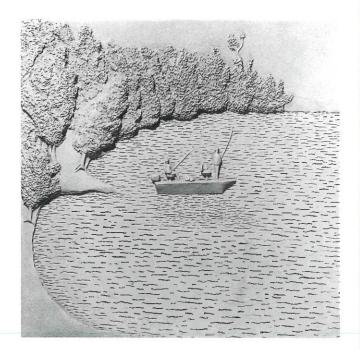
The cutting of the great forests left the land prey to erosion. In addition, certain farming practices and air pollution—such as the acids from copper smelters at Ducktown—aggravated the problem. The denuded earth could no longer hold the rainwater. Now the rains cut into the soil with a fierceness that left the land scarred and barren. The water rushed down these new pathways, carrying valuable topsoil with it. With land wearing out and washing away, farms that had sustained families for years became deserted.



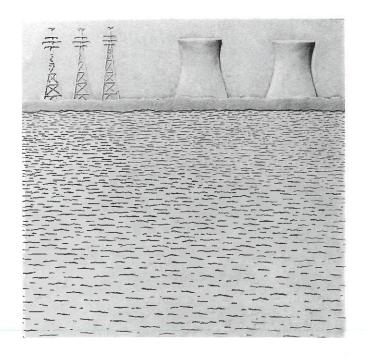




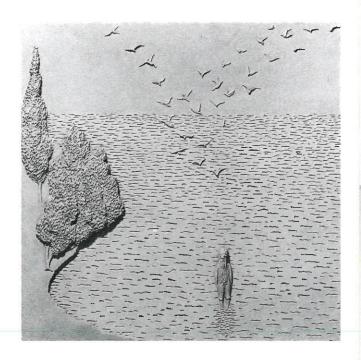
The Tennessee Valley Authority was founded as a conservation agency with goals of flood control, retirement of poor farmland, improvement of navigation, and power production. The enabling legislation enacted by Congress speaks of "the development of the natural resources of the Tennessee River drainage basin and its adjoining territory for the general social and economic welfare of the Nation". An ambitious program of building dams along the waterway changed the wild river into a string of lakes. Once again, life in the region was changed. Like a dream of the past, the ancient temple mounds of Dallas Island lie submerged beneath the waters of Lake Chickamauga.



The bed of the river where native fisherman once cast their nets now lies buried deep under spreading lake waters. Filled with fish, these lakes lure sports fishermen from around the nation, and provide one reason the region has become a favored recreational area. Beautiful scenery, national parks, hiking trails, boating, camping, and other lures of outdoor life attract visitors and residents all year round.



When the World War II decision was made to build the atomic bomb, the hydroelectric power available through the TVA prompted the government to establish Oak Ridge as an atomic research site. After the war, a search for peaceful uses of atomic energy saw TVA become a leader in the use of nuclear reactors as a source of power generation. Cooling towers from these plants have become new silhouettes in the landscape, a symbol reflecting both new technologies and new environmental concerns.



Although the story of the Tennessee River is one of change, certain constants remain: the land, plants, animals, water, people. Together, these are joined in life's ever-unfolding drama as they were in the past, as they are now, as they will be in days to come.

Acknowledgements

The following people were very helpful in conducting research and assembling pictorial resources.

Vilma Fields, *Executive Director* Chattanooga African American Museum

Dr. Charles Hudson
Department of Anthropology and Linguistics
University of Georgia

Dr. Nicholas Honerkamp
Jeffrey L. Brown Institute of Archaeology

Jonathan L. Taylor, *Principal Chief*The Eastern Band of Cherokee Indians

Patricia Bernard Ezzell and Robert Koller Tennessee Valley Authority

David H. Dye Department of Anthropology Memphis State University

Ken Blankenship, Executive Director Joan Orr, Archivist Cherokee Museum at Quallah

Clara Swann, *Head*Local History and Geneology Dept.
Chattanooga Hamilton County

Jefferson Chapman Ph.D., *Director* Frank H. McClung Museum

Carson Camp
Sequatchie Valley Historical Association

Dr. Gerald Smith, *Director* Chucalissa Museum

Deborah Jean Warner Smithsonian National Museum of American History

Wayne Moore Tennessee State Archives

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