

Arkansas Architects at Work

An Introduction to notable Arkansas Architects
Students Learning from Statewide Historic Places



Thorncrown Chapel, Eureka Springs,
Designed by E. Fay Jones



Willis Noll Residence, Fayetteville, 1950
Designed by Edward Durell Stone



ARKANSAS HISTORIC PRESERVATION PROGRAM

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An Agency of the Department of Arkansas Heritage

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Instructional Guidelines

Grade Levels

9-12

For the Teacher

Architecture is one of the most effective and available tools we have to teach across the disciplines and at every grade and capability level.

Buildings have much to tell us about people, history, lifestyle, culture, religion, construction methods, ethnic origins, commerce, economy, commerce and technology, Buildings are very accessible historic artifacts that directly link the past and the present.

Curriculum Frameworks

Visual Art Appreciation

R.1.VAA.3 Identify art media, processes, and terminology; architecture(e.g., skyscraper, glass box, drafting, stadiums, minimalism, load bearing, arch, post and lintel, flying buttresses, keystone, dome, floor plan).

R.1.VAA.4 Discuss various influences(e.g., context, understanding of human experiences, aesthetic characteristics, various environments) on works of art.

Art History Baroque to Post-Modern Period

R.1.AHBP.3 Identify art media, processes, and terminology. architecture (e.g., skyscraper, glass box, drafting, stadiums, minimalism).

Objectives

- The student will be introduced to what architecture is and how it relates to history, social change and the environment.
- The student will learn about the history of architecture in Arkansas.
- The student will be introduced to new vocabulary that pertains to 20th century architecture.
- The student will learn about two prominent 20th century Arkansas architects.
- The student will learn what an architect has to consider while designing a building.
- The student will learn that architectural styles are an expression of taste, the time period, creativity and values of the architect, the client and community.

Lesson Plan Procedures

1. Have students read “What is Architecture?” for homework, or read it aloud in class. Have a short class discussion.
2. Ask students read “Architecture in Arkansas” for homework and answer the comprehensive reading questions afterwards.
3. Ask students read the short biographies on Edward Durrell Stone and E. Fay Jones; afterwards discuss the contents.
4. Have students read “What Does an Architect Consider When Designing a Building?”
5. Ask students to complete exercises 1-3 under “Be an Architect.”

Resources

1. Arkansas Historic Preservation Program: Offers a database of all properties listed on the National Register of Historic Places in the state. Great for research.
<http://www.arkansaspreservation.com/Historic-Properties/National-Register/search-national-register-listings>
2. Encyclopedia of Arkansas History and Culture offers a variety of articles about Arkansas architects.
<http://www.encyclopediaofarkansas.net/>
3. Archkitecture: Includes a number of lesson plans on general architectural topics.
<http://archkitecture.org/learn/>
4. Center for Understanding the Built Environment: Includes a number of lesson plans on architecture and its connection to social issues.
<http://cubekc.org/>
5. Building Big: a series of lessons from PBS that focus on the engineering of architecture.
<http://www.pbs.org/wgbh/buildingbig/index.html>
6. The J. Paul Getty Museum: Offers several lesson plans focused on architecture as art.
http://www.getty.edu/education/teachers/classroom_resources/curricula/art_architecture/aa_lesson_plan_index.html
7. Oxford University Press: Offers several architecture related lesson plans through its Oxford Art Online program:
<http://www.oxfordartonline.com/public/page/lessons/KahnLesson1>
8. The National Building Museum: Offers a number of lesson plans.
<http://www.nbm.org/schools-educators/educators/lessons.html?referrer=https://www.google.com/>

What is Architecture?*

Architecture is a form of art and construction. It is the art of designing buildings that serve a purpose. For example, a skyscraper is designed and constructed to hold office spaces or the purpose of a house is to provide shelter and comfort for a person or family. When a building is designed, usually there is some regard to aesthetics. Aesthetics refer to what an individual or culture consider beautiful, sometimes it can be very elaborate or very simple.

A person who designs buildings is called an architect. Although an architect is trained as an artist, he or she will have studied many different disciplines besides art. An architect must learn about mathematics, science and sociology (the study of the origin and development of human behavior). An architect will use mathematics when drawing a corner in a room or determining the length of a hallway or figuring out how to make a building stand. An architect will use science when selecting materials to use to build the structure. The architect must be aware of who will be affected by the new building, as well as the effects on the surrounding environment.

Architects are responsible for making sure that the building is sturdy and safe for people to occupy, but they also want it to be functional and interesting and attractive.

Frank Lloyd Wright, one of the most internationally famous 20th century architects and a great influence of Edward Durrell Stone and E. Fay Jones, once described architecture this way:

“Architecture is that great living spirit which from generation to generation, from age to age, proceeds, persists, creates, according to the nature of man, and his circumstances as they change. That is really architecture.”[†]



Frank Lloyd Wright, 1867-1959



Solomon R. Guggenheim Museum, New York City

* This section was adapted from *ARCHI-TEACHER: a Guide to Architecture in the Schools*, written by Michele Rojek Olsen and Gary L. Olsen, AIA.

[†] Frank Lloyd Wright, *Frank Lloyd Wright: In the Realm of Ideas*, edited by Bruce Brooks Pfeiffer and Gerald Nordland. Carbondale and Edwardsville: Southern Illinois University, 1987.

Architecture in Arkansas*

Arkansas is better-known for its natural attractions than its man-made ones. Its architectural history is much different from other states that are older and more **affluent**, and whose state architecture is well documented. Before the Civil War (1861-1865), there were very few men in Arkansas who could claim to be trained architects. These men were skilled craftsmen who planned the buildings they constructed. It wasn't until after the Civil War that architects deserving the title began to permanently settle in Arkansas, taking advantage of the many opportunities to rebuild after the war. Between 1865 and 1870, Little Rock's population tripled in size, creating a building boom that drew prominent architects from the north.

Because most Arkansas towns during the late 19th and early 20th century were too small to support an architect's practice, Little Rock-based architectural **firms** designed buildings all over the state. Early Arkansas architect **Charles L. Thompson** had more than 120 of his firm's **designs** (time period 1890s-1930s) recognized for their significant impact on the state's **built environment** and listed on the **National Register of Historic Places** in 1982.

Few of the architects that came to Arkansas were professionally trained because there weren't very many schools with architecture programs. Most of the early Arkansas architects started as **draftsmen** and worked their way up or were educated in **engineering**. Eventually, educational and licensing **requirements** for architects became stricter, and any young Arkansans that were interested in becoming architects had to leave the state to go to school. Some returned home to start their own firms, some chose not to. What changed the architectural profession within the state of Arkansas was the creation of the architecture program at the University of Arkansas in 1946. It was the first architecture program in the state, and **E. Fay Jones** was one of the first five students to graduate from the program in 1950. The original studio space for the architecture program was located in Fine Arts Center, which was designed by Fayetteville native **Edward Durrell Stone**. The program eventually becomes the School of Architecture in 1974 and Fay Jones serves as the school's first **dean**. In 2016, the school celebrated its 70th anniversary.

The number of architects in Arkansas increased with the availability of professional training in the state. Many of those Arkansas-trained architects opened firms in smaller towns, making it easier for anyone who needed an architect to find one instead of having to go to Little Rock for assistance. However, even in Little Rock, the architectural firms stayed small and provided services to people within the area. Only a very few have been considered large firms. Today, the American Institute of Architects (AIA) lists 118 architectural firms in Arkansas.

Although many architects have practiced in the state throughout the years, there have been only two Arkansas architects who have received significant national and international recognition, Edward Durrell Stone and Fay Jones. Of the two, only Jones received his architectural training and established a practice in the state. Both Arkansas architects were awarded the AIA Gold Medal.

* This section was adapted from the National Register of Historic Places historic context *The Arkansas Designs of E. Fay Jones, Architect*. Available at <http://www.arkansaspreservation.com/News-and-Events/publications>

Architecture in Arkansas Vocabulary

Affluent: someone or a place that is wealthy and prosperous.

Built Environment: this refers to the buildings and structures found in the community you live in.

Charles L. Thompson: an architect that came to Arkansas in the late 19th century (1800s). He established one of the first architectural firms in the state.

Craftsman: a person who is skilled in a trade; for example, a carpenter or a blacksmith.

Dean: someone who supervises a school within a college or university. The person is in charge of the students and teachers.

Design: the art is an arrangement of parts, lines, shapes, colors and form.

Draftsman: a person who draws plans of structures.

Engineering: the planning, designing and construction of buildings, roads or bridges.

Firm: a business partnership of more than one person.

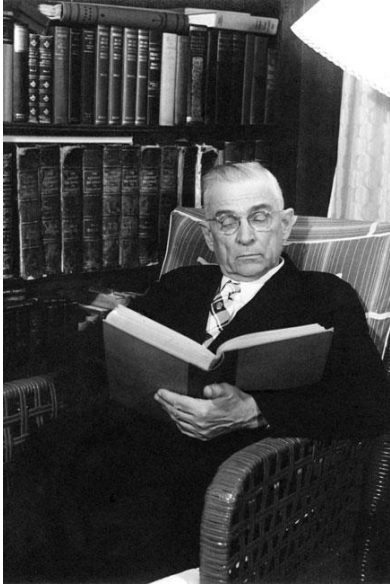
National Register of Historic Places: see section on historic preservation, page 14.

Requirements: something that is needed; for example, students are required to pass their classes to graduate from school.

Reading Questions for Architecture in Arkansas

1. Were there a lot of architects living in Arkansas before the Civil War? What changed in Arkansas architecture after the Civil War? Why?
2. Why did early Arkansas architects design buildings all over the state? Who was an early Arkansas architect?
3. Most early Arkansas architects weren't professionally trained as architects. What were they educated as instead?
4. What changed the architecture profession in Arkansas?
5. Who was one of the first students to graduate from the University of Arkansas's School of Architecture? Which architect designed the original studio space for the school?
6. What does AIA stand for?
7. How many architectural firms are there in Arkansas today?

Charles L. Thompson (1868 – 1959)¹



Charles L. Thompson, courtesy the Butler Center for Arkansas Studies

Charles Thompson was one of the most successful Arkansas architects of the late 19th and early 20th centuries. His architecture **firm** designed more than 2,000 buildings across the state, with hundreds still standing today. Although he had no formal education as an architect and was not born in Arkansas, his work has left a lasting legacy on the Arkansas built environment.

Charles was born in November 1868 in Danville, Illinois. By the time he was fourteen, both his parents died and he and his six siblings moved to Indiana to be raised by relatives. He quit school to work in a mill to support his siblings. As a teenager, he served as a **draftsman** for an architect whose office was above the same mill. In 1886, at the age of 17, he moved to Little Rock to work as a draftsman for an architect named Benjamin Bartlett. Arkansas was growing rapidly at this time, but was still part of the western frontier. Charles later said that one of the reasons he chose to settle in Little Rock was because it was “the farthest in the wilderness.”

Charles was a hard worker, and just two years after moving to Little Rock, he became a full **partner** in the firm of Bartlett and Thompson. In 1890, Benjamin Bartlett moved to Mississippi and Charles became the sole partner of Charles L. Thompson, Architect and Superintendent. Charles was a very successful businessman who worked with many different partners over the years. In 1891, he partnered with Fred J. H. Rickon to establish the firm of Rickon and Thompson, Architects and Civil Engineers. This firm was one of the earliest associations of an architect and an **engineer** within a single firm. Throughout his career, Charles worked with several other architects including Thomas Harding, Sr., Frank Ginocchio, and Theo Sanders.



Park Hotel, Hot Springs. Designed by Charles L. Thompson.

Charles Thompson designed **high style** buildings. Early in his career he designed in the **Queen Anne**-style, but over the years as tastes changed, he began using more **Colonial Revival**-style elements. Although his firm was located in Little Rock, he designed many buildings across the state and many are listed on the National Register of Historic Places. His most famous projects include the Washington County Courthouse in Fayetteville built in 1905, El Dorado High School constructed in 1924, Marlsgate Plantation in Scott built in 1904, and Little Rock City Hall constructed in 1906.

¹ Roy, F. Hampton. Charles L. Thompson and Associates: Arkansas Architects 1885-1938. August House: Little Rock, 1982.

Witsell, Charles, Jr. “Charles Louis Thompson (1868-1959). The Encyclopedia of Arkansas History and Culture. <<http://encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&entryID=28>> Accessed 11 May 2012.

Vocabulary

Firm: A business partnership of two or more people.

Draftsman: A person who draws plans for a structure.

Partner: A person who is involved in the management of a company or firm; sometimes called a principal.

Engineer: A person who plans and designs roads, bridges, buildings and the areas around buildings.

High Style: Formal architecture designed by trained architects. This type of style relies on outside ideas from other countries or time periods and outside materials not found locally; sometimes called “polite architecture.”

Queen Anne: A type of high style architecture popular in Arkansas from 1880 – 1910 based on designs from England. Characteristics of the style include asymmetry, elaborate woodwork, bright colors, and large porches.

Colonial Revival: A type of high style architecture popular in Arkansas from 1885 – 1945 based on designs from the original 13 American colonies. Characteristics of the style include symmetry, emphasis on the front door with porticos, columns, pediments and dormer windows.

Jewel Parnell Bain (1901 – 1996)²



Jewel Parnell Bain had no formal architecture training, yet she greatly impacted the landscape of **domestic** architecture in Pine Bluff. In the early 1900s there were very few opportunities for women in the field of architecture, but she carved a path to become an influential designer in one of Arkansas's growing cities.

Jewel was a lifetime resident of Pine Bluff. She was always interested in building and as a child spent hours in the family yard gathering sticks and building houses. Jewel once said, "Building and decorating are in my blood. When I was a child, ever since I can remember, I was interested in building and decorating."

Jewel was inspired by many different cultures and ideas, and each of the homes she designed reflects a different style. Her first home was the most **vernacular** of the four she designed. The home was completed in 1924 when Jewel was in her early twenties. She wanted to begin building even earlier, but after World War I building materials were very limited and she needed to postpone construction. The first home was designed in the **Craftsman**-style, a very popular style during the time period it was built. This home was similar to other houses in the area but had distinct features that made it unique, including decorative brackets and carvings. Jewel's next home was more modern in design and inspired by magazines images. It is also believed she may have been inspired by the Homes of Tomorrow Exhibition at the 1933 Chicago World's Fair. Completed in 1937, the **Art Moderne** home she built in Pine Bluff was very different from other homes found in Arkansas. It was of steel construction and boxy in shape featuring casement windows, yellow brick and **carrara glass**.

Jewel was inspired by Italian design and wanted to construct her third home in this style, but the cost was too high. Instead, she decided to build another modern yellow brick house. This home, completed in 1948, had similar features to the first modern house, including carrara glass, but was larger. The final home Jewel designed was completed in 1965 and inspired by Japanese culture. She traveled to Japan several times while planning the design. The house features a blue tile roof imported from Japan and a curved moon door instead of a square front door.

Education and employment opportunities were very limited for women of Jewel's generation. Although she lacked formal education, Jewel learned how to draw floor plans and rough elevations for her homes. She hired professional architects from Arkansas, Louisiana and Florida to do the blueprints, but she contended that her plans were drawn so well to scale that changes were not necessary and floor plans were never changed. The homes she designed in Pine Bluff are still standing and serve as an example of her determination and creativity.



Jewel Bain House No. 2, Pine Bluff, Arkansas

² Ault, Larry. "Pine Bluff leader had knack for architecture." Arkansas Democrat-Gazette. 27 January 1996. 6B

Freeman, June. "The Houses of Jewel Bain: Contributions to the Domestic Architecture of Pine Bluff, Arkansas." History of Arkansas Architecture Term Paper; 20 Nov 1984.

Lovelace, Lyle. Bain Homeowner, Pine Bluff. Personal interview with author, 14 May 2012.

Vocabulary

Domestic: Relating to the home or household. In architecture, the design of homes or residences.

Vernacular: A type of architecture in which buildings are designed by people with no formal architecture training using local materials and ideas; they usually cannot be placed in a specific period of time; sometimes called “folk architecture.”

Craftsman: A style of American architecture popular in the Arkansas from about 1910-1950. Characteristics of the style include low-pitched roofs, wide overhanging eaves, exposed rafter tails, handcrafted details and natural colors.

Art Moderne: A type of modern architecture style popular from about 1930-1950. Characteristics of the style include flat roofs, boxy shape, corner windows, emphasis on horizontal.

Carrara glass: Colored structural glass popular in modern architecture and interior design from 1930-1950.

Silas Owens, Sr. (1907 – 1960)³



Silas Owens, Sr.

Silas Owens, Sr. was a successful **stonemason** and craftsman who designed and built several homes, churches, and commercial buildings in Arkansas. His **Mixed Masonry** buildings were a popular style of vernacular architecture in Arkansas from the 1930s to the 1950s.

Silas Owens, Sr. was born on December 26, 1907 in Solomon Grove, a traditionally African American community in Faulkner County. Silas grew up assisting his father with the family farm and later owned land on Batesville Mountain in Solomon Grove where he grew corn, potatoes, and peaches. As a young man, he was known to have a love of construction work, but it is unclear when he began working in the construction field. Silas may have first started his construction business as a teenager and by his late twenties worked under a **Works Progress Administration** contract on the 1936 Reptile House and Elephant House at the Little Rock Zoo.

Silas received training in **carpentry** and drafting from a local man, but his famous rockwork was a self-taught skill. Silas was known as a hardworking man with great artistic abilities. He worked with a variety of stones and materials, but he preferred to work with sandstone. His signature style was a herringbone pattern using large, long rocks. Not only was Silas known as an artistic craftsman, but he was also admired as a businessman who taught his skills to local men and boys, including his son Silas Owens, Jr.

During the period of **segregation** in the South, educational opportunities for African Americans were very limited. Few African Americans served as formally trained architects in the South during this time. A few buildings in Arkansas were designed by black architects during the **Jim Crow** period, but none of these architects were from or lived in the state of Arkansas. Although he lacked a formal architecture education, Silas designed and constructed buildings in Little Rock, North Little Rock, Camden, Hot Springs, Malvern and Pine Bluff for both white and black families. Silas faced some racism in his career, but his strong work ethic, fine craftsmanship, attention to detail and business skills generally led people to hire him regardless of race.

Silas's niece Lillie Owens described her uncle's buildings this way: "His work was nothing but neat and perfect." Many of Silas's buildings are still standing today and listed on the National Register of Historic Places including the two earliest examples of his rockwork at the Solomon Grove Smith-Hughes Building in Twin Groves and the Charlie Hall House in Twin Groves, both built in 1938.



Earl and Mildred Ward House, Conway, Arkansas. Designed and built by Silas Owens, Sr.

³ Hope, Holly. A Storm Couldn't Tear Them Down: The Mixed Masonry Buildings of Silas Owens, Sr. 1938-1955. Arkansas Historic Preservation Program. Castleberry-Harrington Historic District. National Register of Historic Places Nomination Form. Arkansas Historic Preservation Program. 11 April 2007.

Vocabulary

Stonemason: A person who prepares and lays stone in building.

Mixed Masonry: Architecture style using a combination of materials including cream and red brick, sandstone, limestone and crystals that was popular in Arkansas, Texas, Oklahoma and Missouri in the 1930s -50s.

Works Progress Administration: One of the New Deal programs during the Great Depression developed by President Franklin Delano Roosevelt's administration to create jobs, enhance infrastructure and construct buildings.

Carpentry: Making or repairing things out of wood.

Segregation: The enforced separation of different racial groups.

Jim Crow: The system of segregation in the United States, especially in the South, from 1877 to the mid-1960s that enforced the separation of white and black people.

E. Fay Jones*

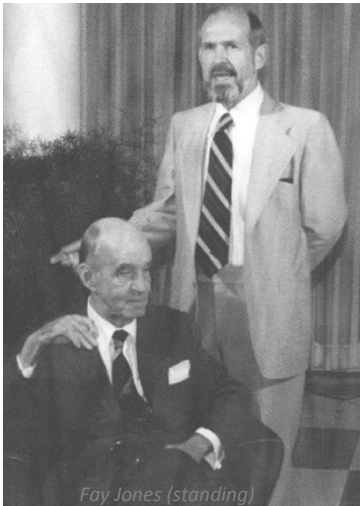
Euine (pronounced “U-wun,” a Welsh form of John) Fay Jones was born on January 31, 1921, in Pine Bluff, Arkansas. Shortly after he was born, his family moved to Little Rock and then to El Dorado, where his father opened a restaurant. He grew up working in the restaurant, which made him realize, at an early age, that the restaurant business wasn’t for him.

“As early as I can remember, I liked to paint and draw, but I also liked to build things...”⁴

During elementary and high school, Fay Jones enjoyed art and constructing things out of salvaged materials like old fence boards or fruit crates. He built several tree houses using these materials. However, it wasn’t until 1938, when the young Jones saw a short film at the Rialto Theatre in El Dorado that he realized what he wanted to do with his hobby. The film was about Frank Lloyd Wright’s SC Johnson Wax headquarters building in Racine, Wisconsin. He was so inspired by the film that he decided to pursue a career in architecture.



Rialto Theatre in El Dorado



Fay Jones (standing)

After graduating from high school, Jones attended the University of Arkansas, but there were only two or three architecture classes available, so he studied civil engineering instead. While at the university, the United States entered World War II and Fay Jones decided to join the Navy and train as a naval pilot. He moved to San Francisco, and in January 1943, he married Mary Elizabeth (Gus) Knox. Three years later, Fay Jones returned to the University of Arkansas where a new program in architecture was started, and classes were in the new fine arts building designed by Edward Durrell Stone.

In 1949, Jones met his inspiration, Frank Lloyd Wright, at the Shamrock Hotel in Houston, where an American Institute of Architects (AIA) convention was being held.

“Four of us got up a little field trip, thinking of the possibility of catching a glimpse of our hero, Frank Lloyd Wright. When we walked in the [hotel] lobby, it was filled with celebrities. We went down a hallway, but at the end of the hall were these big padded doors with shamrocks on them. The doors parted and out walked Frank Lloyd Wright, putting on his porkpie hat and cape. We kids plastered ourselves back along the wall and gave him room to walk by, but I guess he saw our fright. He walked over, stuck out his hand, and said ‘Hi, I’m Frank Lloyd Wright,’ and I said, ‘Oh, I know,’ and he said, ‘I’m an architect,’ and I said, ‘Oh, Mr. Wright, we know who you are.’”⁵

*Majority of this section is adapted from *Outside the Pale: the Architecture of Fay Jones*, a publication of the Department of Arkansas Heritage. All photos of architects are courtesy of Special Collections Division University of Arkansas libraries, Fayetteville.

⁴ Fay Jones, p. 2, *Outside the Pale*.

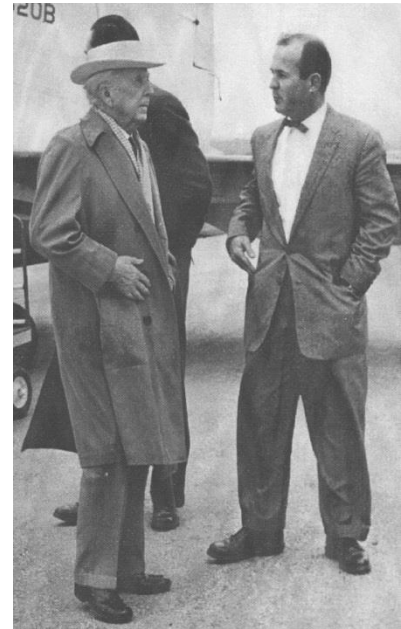
⁵ Fay Jones, p. 12, *Outside the Pale*.

While a graduate student at Rice University, Fay Jones met architect Bruce Goff, who was practicing in Norman, Oklahoma. Jones had seen some of Bruce Goff's work and was fascinated by what he was doing. One summer, while working for an architectural firm, he received a telegram from Bruce Goff offering him a job. Bruce Goff's style of architecture became another influence in Fay Jones' work.

In 1953, Jones and his family spent a summer internship with Frank Lloyd Wright at his home, Taliesin East at Spring Green, Wisconsin. Later on that year, Fay Jones began teaching at the University of Arkansas. He would serve as chairman of the Department of Architecture from 1969-1974 and dean of the School of Architecture from 1974-1976.

For many years, Jones had a thriving architectural practice in Arkansas. His firm designed more than 200 houses and several chapels and pavilions throughout Arkansas, as well as surrounding states. Unfortunately, he developed Parkinson's disease⁶ and in 1997, he retired from architecture. Fay Jones died on August 31, 2004, at the age of 83.

Fay Jones viewed architecture as being part of a natural process, like how a seed or kernel develops into a full grown plant. He believed that architecture should be organic⁷. It should promote harmony between living spaces and the natural world by using designs that conform to the building's surroundings, letting in the outdoors, creating a relationship between the structure and the environment.⁸



Frank Lloyd Wright and Fay Jones, Fayetteville, AR 1958.

"...these buildings were not made to be fashionable or to win prizes, but really, only to please those who would use them...and to belong to the places where they're built. I would like the work to be perceived as buildings with style, not of a style."⁹

Fay Jones was known to be a generous, kind and humble person. He chose to practice within Arkansas, and continued to do so even when the completion of Thorncrown Chapel in Eureka Springs brought him international recognition. Thorncrown Chapel is Jones' most respected and recognizable work. It is constructed out of southern-pine wood and huge sheets of glass, creating a unique pattern that allows in a lot of natural light. The chapel was awarded the AIA Honor Award in 1981, which led to Fay Jones receiving the AIA Gold Medal in 1990.

⁶ Parkinson's disease is a degenerative disorder of the central nervous system that often impairs the person's movement and speech.

⁷ Something that is natural, using natural materials like stone or wood for construction.

⁸ *Arkansas's Resident Genius* by Jan Cottingham, Arkansas Times, February 9, 2001, p.13.

⁹ Fay Jones, p. 36, *Outside the Pale*.

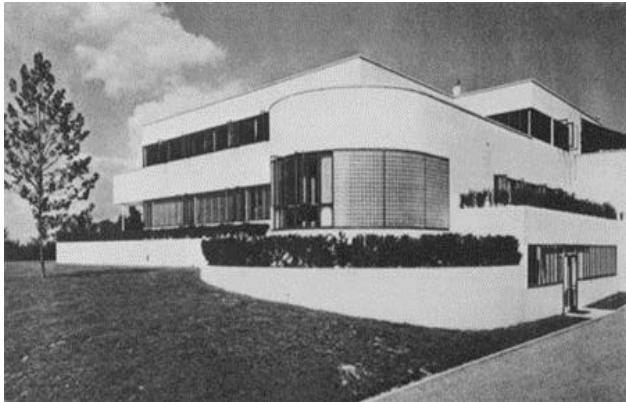
Edward Durrell Stone*

Edward Durrell Stone, a major figure in 20th century architecture, was born in Fayetteville, Arkansas, on March 9, 1902. Edward's mother was an English teacher at the University of Arkansas, and his father owned a business in Fayetteville. He was a good student, and enjoyed being outdoors. Even as a child, he knew what architecture was because his brother, Hicks, decided to be an architect after visiting the St. Louis World's Fair in 1904. Edward was very creative. His mother encouraged his interest in drawing and building projects.

"She gave me a room upstairs in our house, where I had my own carpentry shop and built furniture, boats and bird-houses."¹⁰

While still in grammar school, Edward Durrell Stone won his first architecture award. A local lumber company and the daily paper (owned by Senator J. William Fulbright's family) hosted a competition for a birdhouse for the boys living in Washington County. He built a birdhouse that looked like a log cabin, and it won first place. Just like Fay Jones, Edward got his start in designing buildings by constructing birdhouses.

Edward began college in the art department at the University of Arkansas. One of his art teachers took an interest in Edward's talent, and wrote his brother a letter saying that Edward should be encouraged to continue his education. In 1923, Edward moved to Boston where his brother got him a job as an office boy in the architectural firm of Strickland, Blodgett & Law. He began studying architecture at the Boston Architectural Club, and eventually met and was hired as a draftsman by architect Henry R. Shepley. Three years later, Edward entered a competition for a scholarship to Harvard. Again, he won first place, which was a year's tuition. He finished two years of architectural study in a year and transfer to Massachusetts Institute of Technology (MIT) for his last year of study.



Richard Mandel House, 1934

Edward worked with several architectural firms in New York after his studies. He worked on the Radio City Music Hall and Center Theater at Rockefeller Center. His designing talents received wide recognition with the Mandel House in Mt. Kisco, New York in 1934. It was the first modern house in the eastern United States. It was constructed of concrete and steel designed in the popular architectural style known as International. Most of Edward's 1930s architecture featured characteristics of the International style

* This section is adapted from the National Register of Historic Places nomination of the Jay Lewis Residence, McGehee, Arkansas. Available at <http://www.arkansaspreservation.org/historic-properties/national-register>.

¹⁰ Edward Durrell Stone, *The Evolution of an Architect*. New York: Horizon Press, 1962, p. 18-19.

and other modern architecture he had seen while studying in Europe. The designs featured simple geometric shapes and large windows. Edward was successful enough during this period to start his own firm, Edward Durrell Stone & Associates, in 1936.

Edward's style of architectural changed in the 1940s after he took a cross country trip to California. He stopped in Wisconsin to visit Frank Lloyd Wright's home, Taliesin. He was inspired by how the house seemed to be part of the surrounding countryside.



Pine Bluff Civic Center, photo taken in 1970.

"The architecture was attuned to the natural beauty of the site...It was the first time I had ever walked through one of Mr. Wright's buildings and I was overwhelmed by its beauty."¹¹

This experience influenced his designs during the 1940s. Edward used natural materials and open floor designs. He wanted to get rid of hallways, instead, have every room open up onto the next room. The 1940s and early 1950s were a very busy time for Edward in Arkansas. He designs several homes in Fayetteville,

Harrison, Little Rock, Pine Bluff and McGehee, as well as public buildings such as the Sigma Nu Fraternity House in Fayetteville, hospital and school for the University of Arkansas Medical School and the Pine Bluff Civic Center.

However, unlike Fay Jones, Edward Durrell Stone is known most for his designs outside of Arkansas. His United States Embassy building in New Delhi, India won him international praise. The style of the building was something completely new for Edward.

"First, I decided to place the structure on a platform or podium under which automobiles could be sheltered from the 120 degree sun of India. Also-let's be frank-I wanted to keep them out of sight. The Idea of a monumental building rising from a sea of multi-colored, tail-finned automobiles is simply revolting."¹²



United States Embassy in New Delhi, India

Edward placed offices on two stories around a water garden to give the floors a cool feeling, and added outside walls that looked like grills to keep the sun from the windows. The Pine Bluff Civic Center has similar exterior walls. Frank Lloyd Wright called it one of the finest buildings in the past one hundred years. The March 31, 1958, issue of *Time* magazine called him one of the freest spirits in architecture of his generation. Ed Stone retired in 1974 and died on August 6, 1978. He is buried in Evergreen Cemetery in Fayetteville, Arkansas.

¹¹ Edward Durrell Stone, *The Evolution of an Architect*, p. 89.

¹² Edward Durrell Stone, *The Evolution of an Architect*, p. 138.

What Does an Architect Consider when Designing a Building?*

Architects Fay Jones and Edward Durrell Stone had to consider a lot when designing one of their buildings. Below are some things an architect will think about at the drafting table.

Location: The first thing the architect must consider is the future location of the building. Will the building be located on a crowded city block or will it be on lots of land? If the building is located in a city, the architect will have to design for a small city lot, but if it's in the country, the building can be bigger. Is the terrain smooth, hilly or swampy? Is the location likely to flood? If the location has a history of flooding, the architect might want to design the house to sit on stilts (raised up from the ground) to protect it from rising waters.

Climate: An architect will have to consider the climate (weather) of the location. You can see this in the design of many historic houses. If a house was built in a dry, hot climate like you would find in New Mexico or Arizona before air conditioners or central heating, it probably would have had flat roofs and thick walls made of clay-baked bricks. The clay-brick walls soak up the sun, keeping the house cool during the day, but also warm at night. A historic plantation house in the Arkansas Delta would have verandas (porches) that wrap around the house to protect the outside of the house from the heat. Or the house might have a screened in sleeping porch to be used when it was too hot to sleep inside.

Style: The building's architectural style is a combination of shape, age, color, decoration and building materials, and if it's a historic building, the age is considered, too. When an architect is selecting a style for the building, he/she will think about what style is popular at the time or what styles are present in a neighborhood. Looking at already existing styles an area is important when respecting and preserving a historic neighborhood. Architects that design new stores will sometimes use a historic architectural style if the new building will be located in a historic area so the new building will blend in with the old ones, instead of sticking out and taking away from the uniqueness and beauty of the neighborhood or downtown.

Client's taste: A client is someone (or group of people or company) who hires an architect. The client is ultimately the one who decides a lot for the architect. If the client wants a huge, fancy, decorated house then the architect will take this in consideration when designing the house. If the client is interested in a house that is built with natural, regional materials then they probably would have hired Fay Jones to design the house. Sometimes the client's taste can be very strange and will want the architect to include things that you wouldn't normally see on or in a house or building, or the client might want to add lots of elaborate decorations.



The owner of the Hornbook House, located in downtown

Little Rock, wanted the fanciest house in the neighborhood. The

Economics: The style, size, location and building materials can all be influenced by economics. Economics refers to the finances or how much something costs. An architect has to consider how much his/her client can afford to spend when designing a building.

* This section is adapted from *Under Every Roof: a Kid's Style and Field Guide to the Architecture of American Houses* by Patricia Brown Glenn. Washington D.C.: The Preservation Press, 1993.

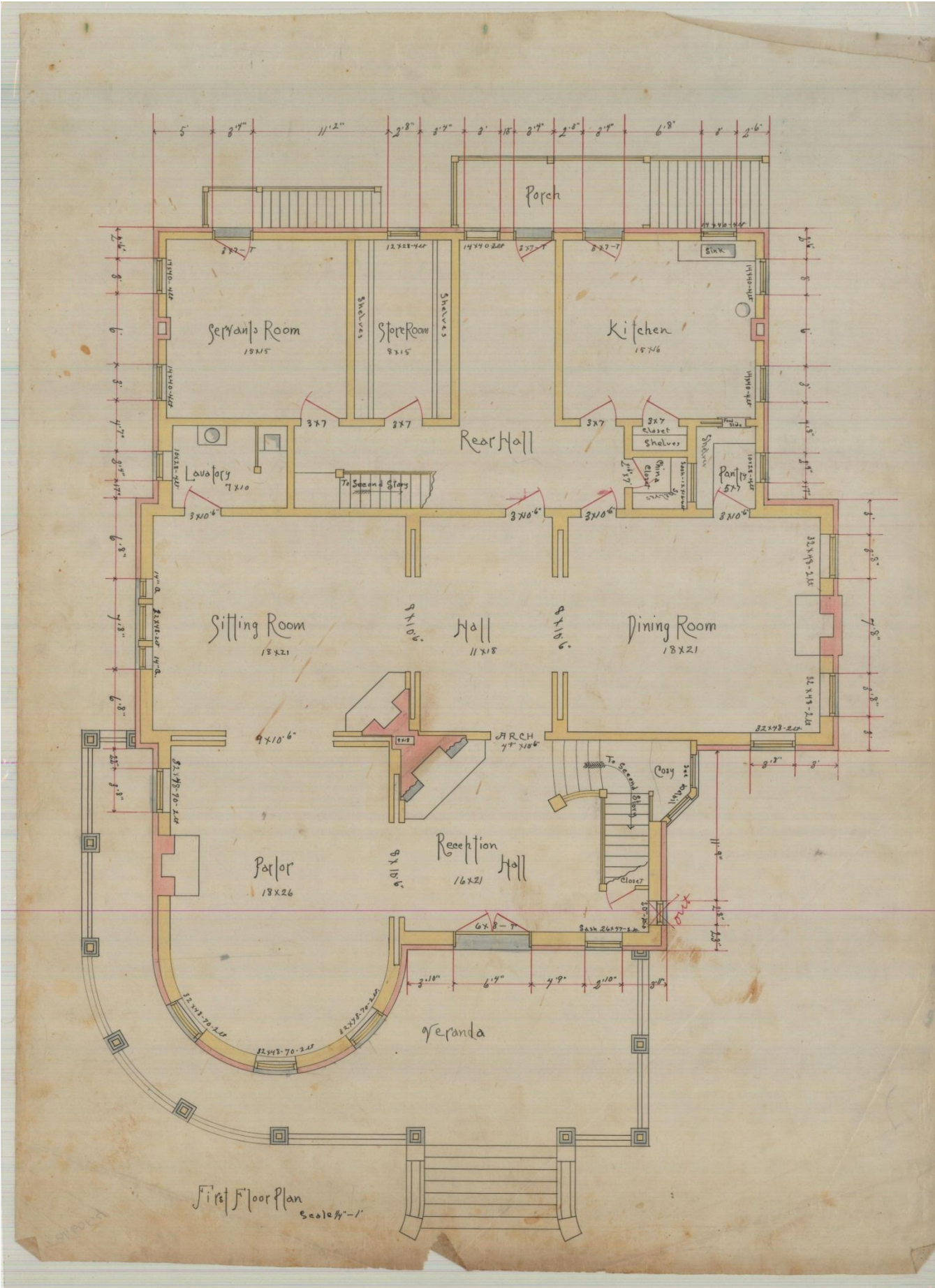
FLOOR PLAN DESIGN ACTIVITY

Supplies:

Floor plan of Ragland House
Pencil
Ruler
Graph paper or plain white paper
Tape measure
Protractor (optional)

Directions:

1. Make copies of the floor plan on the next page or display the image on a screen. Determine if you would prefer students to work in pairs, larger groups or individually. This image is the first floor plan of the Ragland House in Little Rock, designed by architect Charles Thompson. This floor plan was drawn by hand, but today most architects use computers to design floor plans. Ask students to examine the floor plan and then answer the following questions:
 - **What are the rooms located on the first floor?**
A: Kitchen, dining room, parlor, sitting room, reception hall, hall, lavatory (bathroom), servants room, pantry, store room
 - **What is the scale of this floor plan?**
A: $\frac{1}{4}$ inch equals 1 foot
 - **What are the dimensions of the dining room?**
A: 18 feet by 21 feet
 - **How many sets of stairs are there?**
A: Five (including the front steps)
2. Ask students to draw their own floor plan. Determine if you would prefer students to draw a plan of their house, apartment or other community building (homework) or to draw your classroom or school building. Depending on time allotted, you may ask students to draw just one room or an entire floor of a building.
 - First, students will measure and record the size of the room or rooms with a tape measure. Students will use math (division and geometry) to draw each room to scale. A common architectural scale is $\frac{1}{4}$ inch equals 1 foot.
 - Next, ask students to use rulers to draw the outline of each room to scale on their graph paper or unruled paper. Graph paper is easier to use since most have boxes that are $\frac{1}{4}$ inch squares. Students may want to use a protractor to draw the angles where the walls meet. Students should examine the included floor plan and use similar symbols to add windows, doors, stairs, sinks, toilets, etc. to their floor plans. They may choose to include a note with any materials used in the construction of the rooms.



First floor plan
Scale 1/8" = 1'

Be an Architect Activity*

Now that the students have learned what an architect might consider, use the following activities to give the students the opportunity to role play as an architect. Have the students pair off, one student as the architect and the other as the client. Let the student alternate roles after the completion of each activity, so each student gets the chance to play an architect and a client.

Part One: The Client

1. Have each student write a description of their dream house and then exchange descriptions with the student who is acting as the architect.
2. The student acting as an architect then draws the house according to the other's (client's) description including all details given.
3. Allow the students 20-25 minutes to write their descriptions.
4. Upon completion, ask the students if the final drawing depicts what the student client wanted.
5. Ask "the client" to reflect on how well the "architect" interpreted his or her vision, and write a paragraph explaining the answer.
6. Ask the "architect" and "client" in each group to share their work with the class.

Part Two: The Climate

1. Divide the class into small groups and assign each group a different climate: hot and dry, cold and windy, hot and wet, rainy (in the NW corner of the US, it rains 9 months out of the year).
2. Inform the students that their client now has to live in one of those climates and they are to adapt the dream house designs according to the climate. Students will need to reference books or materials on different climates and the kind of homes found in these climates.
3. This activity gives the students an opportunity to use the school library or local library for "research." If internet access is available, students can search for images of homes located in various climates. Search examples: New England homes (cold and windy climate), Arkansas Delta plantations (hot and wet climate) or South American homes (hot and dry climate or hot and wet climate).
4. Students will probably address location when adapting the design to climate. If the client has moved to a hot and wet climate found in the Arkansas Delta, the student architect will have to take in to consideration the possibility of flooding.
5. Ask the "architect" to redraw the "clients" dream house according to the climate assigned to the group.
6. Ask "the client" to reflect on how well the "architect" interpreted his or her vision, and write a paragraph explaining the answer.
7. Ask the "architect" and "client" in each group to share their work with the class.

* This section has been adapted from AIE (Architecture in Education) Classroom Programs, www.aiaphilla.org.

Part Three: The Economics of the Design

1. Now, the student architect has a dream house design the client loves and is suitable for the climate and location, but can the client afford it?
2. Have the students research the prices of building materials like marble, stone, steel, wood (types of wood vary in price), glass or concrete. The price of materials can severely adjust an architect's design. For example, the architect Gideon Shryock's design for Arkansas's first state Capitol building had to be changed because the building materials were too expensive for the young territory's finances (Arkansas was a territory before becoming a state in 1836).
3. Ask the "architect" to make a list of materials and prices, then to total the complete cost (this can be estimated based on the design of the house).
4. Ask "the client" to look at the architects totals and suggest cheaper substitutes by researching the cost of alternative materials. Then, "the client" should make a list of these substitutes and the cost of the final building.



Old State House, the oldest surviving Capitol building west of the Mississippi River