Buildings Tell a Story

Loli de Llano

INTRODUCTION

When first applying to the Houston Teachers Institute's course "Houston Architecture: Interpreting the City," I looked at the buildings around Houston and thought to myself that they tell a story just like books do and that one can learn to interpret or read a building the way you do a book. Since being accepted into the program and visiting several architecturally significant structures in Houston with our seminar leader, architectural historian Stephen Fox, as well as reading articles about those structures, I have had the opportunity to develop my skill at viewing a building and figuring out the message the architect is trying to convey through each structure. It is this ability to view, appreciate and understand the role architecture plays in society, which I want to develop in my students. By analyzing and discussing buildings, I hope to expand my students' perception of architecture and how it shapes a city. I plan on honing this skill in my students by taking them on an architectural tour of the same places we visited in "Houston Architecture: Interpreting the City" via a PowerPoint presentation filled with photos. Through this tour I intend to expose students to the rich history of Houston which can be seen in its many and varied buildings, the architects who designed those buildings and the people for whom those buildings are named. Since I am a librarian, I will organize a field trip to the Houston Public Library downtown as part of my curriculum unit. I also want my students to consider architecture as a future career and will have them complete a number of lessons to expand their interest in the subject as well as invite local architects and architectural students to come speak in the library. As a final product of my curriculum unit, students will be asked to design the library of the future.

As a librarian, one of my objectives is to encourage students to "explore public libraries, university libraries, museums and community resources" (*Library Scope and Sequence*, 1999). The outstanding feature of this course is that the HTI fellows have had the opportunity to do just that – explore public places by participating in architectural tours of them. Naturally as a librarian, one of the first places I want to introduce my students to is the Houston Public Library. Before we visit the library on a field trip, I will show pictures of both the Julia Ideson and Jesse Jones buildings to my students and talk about the history and architectural details of each structure. Following is a description of each to be used in my presentation to my students.

THE HOUSTON PUBLIC LIBRARY

Julia Ideson Building

The first place we visited in our "Houston Architecture" class was the Houston Public Library including the original library, the Julia Ideson Building, and its newer neighbor the Jesse H. Jones Building. Our tour began at the Julia Ideson building, which was built in 1926, designed by Cram & Ferguson, William Ward Watkin and Louis A. Glover and served as the city's central library for 50 years. The original Central Library was renamed in honor of pioneer librarian and civic activist Julia Bedford Ideson (1880-1945) who played an instrumental role in the development of the Houston Public Library system as we know it today. Ms. Ideson was appointed librarian of the Houston Lyceum and Carnegie Library in 1903 and held this position for over forty years. Under her direction, the library collection grew from 13,228 to 265, 707 volumes and circulation increased from 60,000 to 600,000. "Her efforts to improve physical facilities ...resulted in the addition of five branches, a new Central Library in Spanish Renaissance style, and the first municipal bookmobile in the state" (Endelman, *The Handbook of Texas Online*, 14 Apr 2002).

Julia Ideson Building

The first thing one notices when approaching the Julia Ideson building "set on a tree-shaded block and detailed with Spanish Plateresque ornament to insinuate a connection with Texas' architectural-historical past is that it provides a welcome contrast to the tall, brittle towers that now surround it" (Fox, 6). Upon entering the building, which was reopened in 1979 after being renovated, one feels as if they are entering a bygone era of libraries. The interior has been restored and many of the original furnishings are still in use, giving the space a museum-like quality. The irony of the place is that the books are almost hidden from view because in the past the librarian used to retrieve them for patrons. In a sense, this library, which is now used to house archives, special collections, a Texas room, maps and documents (including architectural drawings) on the history of Houston, also provides a window into the history of library buildings. It tells a story of how libraries used to operate and were designed and reminds one of the enterprising librarian whose name it bears.

Jesse H. Jones Building

After touring the Julia Ideson Building, we walked to the new central library named in honor of one of Houston's most influential businessmen and philanthropists, Jesse Holman Jones (1874-1956). Mr. Jones had a far reaching effect on Houston and even the nation. During his time, Jesse Jones "was the largest developer in the area and was responsible for most of Houston's prewar construction. Besides owning nearly 100 buildings in Houston, Jones also built structures in Fort Worth, Dallas and New York City" (Patenaude, *The Handbook of Texas Online*, 14 Apr 2002). In addition, Jones became sole owner of the *Houston Chronicle* in 1926 and established the Houston Endowment, a leading philanthropic foundation in 1937 and the largest foundation in Texas to this day (Patenaude, 2).

Central Public Library

The current central library, which bears Jesse H. Jones' name, was designed by Eugene Aubry of S.I. Morris Associates in 1975, and is "considered by many a handsome work of civic architecture" (Shields, 21). This library, the core of the Houston Public Library System, showcases its collection within a glass-enclosed volume that practically invites the patron to come in and read. Although quite modern in comparison to the former central library, it manages to pull "its surroundings into a civic whole, due chiefly to the scale of its giant portico and the breadth of its dark, bare, brick-paved plaza" (Fox, 6) which acts as the perfect backdrop for many of Houston's downtown festivals. The layout of the Jones library also makes it one of "the most inviting public [spaces] in Houston (McBride, 17). In front of the library sits Claes Oldenburg's bright red steel sculpture *Geometric Mouse, Scale X* (1968), the first work of public art installed downtown" (Fox, 6). The interior of the library by Sally Walsh is bright, airy and stylish. While visiting both sites with my students, I plan on asking them to comment on how each library makes them feel, which they prefer and why, and what type of materials were used to build each just as our seminar leader did when we visited each site. The students will have a checklist that they will take with them on their field trip to answer the above questions. I also will have them sketch each library so they can use those sketches later to help them design their own library for their final products.

Unfortunately, the Jesse H. Jones library was "built just prior to the computer and technology boom of the 1980s and 1990s" (Shields, 21). As a result, library administrators are currently rethinking the future of the library once again. According to

Barbara Gubbin, director of the Houston Public Library System, libraries can no longer be viewed as "simply quiet places to sit and read" (Shields, 25). Rather, the library of the future needs to be much more of a community center, a place where patrons aren't being shushed. Furthermore, Ms. Gubbin goes on to say that she doesn't see why the library of the future can't house a coffee shop, copy center and theatre for public performances in order to attract more people and meet their needs (Shields, 25). These above are issues I want my students to consider when they design their own library.

My visit to the library with Stephen Fox along with the article entitled "Reading Room," in *Cite* magazine plus the fact that I'm a librarian really started me thinking about how libraries need to change in order to keep pace with the changing needs of society. In addition to books, today's library needs to be able to house a variety of media including videocassettes, CDs, DVDs, film and computers for research. Such architects as Rem Koolhaas, who is designing the new Seattle Public Library, are responding to these changing requirements by designing libraries with imaginative spaces that better accommodate the various media. Koolhaas has "envisioned his library as something more than a repository of the written word," insisting that the modern library "must transform itself into an information storehouse aggressively orchestrating the coexistence of all available technologies" (Shields, 25). I would like to draw my students into the debate by asking them to design the library of the future. What will it look like? How will it make them feel? Where would they put it? What material would they use to build it? These are some of the questions I want them to consider as they design their library and maybe even build a model of it. I will be showing the students online photos of Koolhaas' library in Seattle, as well as other modern day libraries such as the San Antonio Central Library, Phoenix Library, plus the Richmond Public Library in Vancouver in order to inspire them to design their own version of the library of the future. This assignment will take place after they visit in person both the Julia Ideson and Jesse H. Jones buildings because I want them to consider how libraries used to look, what they look like now and how they will look in the future. I also plan to invite Ms. Gubbin to come speak to my students about the future of the Houston Public Library or maybe visit her during our field trip to the library. See Lesson Three at the end of this unit for a more detailed description.

MUSEUMS

Museum of Fine Arts Complex

Next stop on our virtual tour of community centers for my students will be the Museum of Fine Arts complex, which was the second place we visited as a class. Prior to this tour, Stephen Fox had us read "Shedding Light on the Beck" by

Watkin Building

Farès El-Dahdah which talked about the newest addition to the MFA. According to both Fox and El-Dahdah, the museums can be viewed as a lesson in the history of twentieth century architecture. First, you have the original structure, the first art museum in Texas, which was designed in a Greek neoclassical style by William Ward Watkin in 1924, the same architect who designed the Julia Ideson Building and the first chairman of Rice's Department of Architecture. According to Fox, this structure with its limestone face and "Ionic columns framed by slightly angled wings...is a kind of textbook presentation of great moments in architectural history" (Fox, 92).

Brown Pavilion and Cullinan Hall

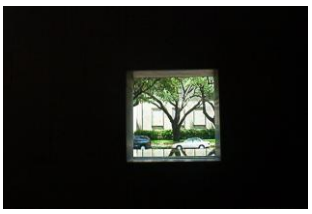
When the museum needed expanding, the great German-American Ludwig Mies van der Rohe was commissioned to design the addition in 1954. His glass and steel Brown Pavilion and Cullinan Hall, named for Joseph S. Cullinan, "founder and president of Texaco and founding donor of the Houston art museum" was attached to the Watkin building and became the new front to the museum (*The Museum of Fine Arts*, 11). According to Stephen Fox, Mies' building "is a classic: precise, subtle, serene, and charged with spatial grandeur. It is the finest modern building in Houston" (Fox, 92). Even though the two buildings are attached at the hip like twins, they couldn't be more opposite in appearance. Watkin's original building is now completely opaque, its windows having been completely sealed-in. Mies' Cullinan Hall is pure transparency with a continuous band of windows that enclose it and provide natural light (El-Dahdah, 20). While discussing the above museums with my students, I plan on showing them the book *The Museum of Fine Arts, Houston: An Architectural History 1924-1986* which provides early photographs of each structure and discusses in detail their plan and development.

Audrey Jones Beck Building

The most recent addition to the museum complex is the postmodern 3-story Beck Building, which was designed by the Spanish architect Rafael Moneo (2000). Audrey Jones Beck, for whom the museum is named, is the granddaughter of Jesse H. Jones. She and her deceased husband, John A. Beck, were important local art collectors who donated their collection of Impressionist and Post-Impressionist paintings to the museum. Mrs. Beck is a lifetime trustee of the museum as well as a trustee of Houston Endowment which, as mentioned earlier, was founded by her grandfather. Houston Endowment, in turn, gave the gift that resulted in the building being name after Mrs. Beck.

According to Martha Thorne, Moneo's museum with its "apparent rejection of 'type' speaks to the careful reader, encouraging multiple layers of interpretation" (Thorne, 20). During our tour of the Beck with Stephen Fox, he helped our class peel those layers to decipher the meaning behind the building. Moneo's Beck building seems to defer to its predecessors and creates a dialogue with them by combining key elements from each. For example, he uses the same limestone as the Watkin's building and a glass entrance like Cullinan Hall. He even pays homage to his neighbors by framing them in two perfectly shaped squares located within the main passageway – one facing the Watkin building and the other the Brown Pavilion. Moneo purposely chose to face his museum west, rather than north in order to engage a conversation between the three museum spaces. "In combination, the Moneo and Mies van der Rohe buildings present a unique art complex of great strength and dignity. By respecting the characteristics of the Mies design and all the functions it so grandly accommodates, Moneo has designed a building of distinction and intensity" (http://www.mfah.org/Beck/architecture.html, 4 June 2002).

Beck Entrance



View from Passageway

Moneo engages in another subtle conversation with St. Paul's United Methodist Church, which Jesse Jones also helped build. St. Paul's is directly across the street from the Beck. St. Paul's, which was completed in 1930, is faced with limestone, the same material Moneo used in the Beck as a way of harmonizing the environment. Just as Moneo framed the museums across the street, so too does he frame St. Paul, with a window which is located on the second floor of the museum, where the Beck's Impressionist paintings are displayed. The view from this window onto the church is stunning. It lends a touch of magic and history to the museum. Here we see a fine example of how a building can tell a story.

The Menil Collection

On our third tour, we visited the museum district of Houston. As we strode around the Menil Collection designed by Italian architect Renzo Piano in 1987, I couldn't help, but think back to the Beck Museum. Both museums seamlessly blend into their environment. Both exhibit a subtle grace that elevates their surroundings and both are utterly devoid of

The Menil Collection

pretension as Mr. Fox would say. Just as Moneo paid homage to his predecessors with his Beck Museum, Piano too pays homage to the neighborhood with his elegantly designed museum. "The broad terrace that circumscribes the museum frames views of – and imposes a sense of measure on – the flat Texas landscape" (Fox, 75). The museum owes its existence and appellation to a woman by the name of Dominique Schlumberger de Menil and her husband John. The museum can be viewed as the story of the Menil's lives for it houses an "extensive collection of modernist, Byzantine, classical, and indigenous art and artifacts that she and her husband assembled" (Fox, 75). The collection's overall theme, according to Mrs. de Menil, "is a spiritual one: the ephemeral nature of the human condition and man's continuing quest of transcendent meaning in that context" (*The Houston International Festival 2002: Teacher Curriculum Guide*, 146).

UNIVERSITIES

University of St. Thomas

Not only did the de Menils leave their imprint on the art community with their museum, but their patronage led to the creation of the art departments of two of Houston's leading universities – St. Thomas and Rice. Fortunately, our class had the opportunity to visit both. During our Museum District tour, we stopped at the University of St. Thomas, where the de Menils "initiated radical change, by spearheading the new campus plan" and "by endowing an art department that, during the 1960s, made St. Thomas the center of vanguard culture in Houston" (Kilian, 22). The university expansion was designed by Philip Johnson, who had recently designed the Menil's home, which in turn, led to his commission to design Welder, Jones and Strake Halls, the cornerstone buildings of St. Thomas campus. Johnson's master plan for these buildings was based on his mentor "Mies van der Rohe's campus for the Illinois Institute of Technology in Chicago and Thomas Jefferson's for the University of Virginia in Charlottesville" (Kilian, 23).

Second Story Paseo

According to Karl Kilian, a former student at St. Thomas during the 1960s, "the Bauhaus-Jeffersonian architecture of St. Thomas, remarkably intimate and human in scale, played an essential role in [his] undergraduate education and provided a sylvan retreat in a city about to explode into the petroleum boom" (Kilian, 23). As I toured the campus with our class, I understood perfectly what Mr. Kilian meant by it feeling like a "sylvan retreat." As you walk along Johnson's second story paseo, which encloses a rectangular green quad and stretches from Doherty Library to the

Chapel of St. Basil

Chapel of St. Basil, it feels like being suspended in midair. "The careful composition of steel framing members and window units, filled with panels of pink St. Joe Brick, gives the campus buildings a strong sense of proportioned grace," according to Stephen Fox (73). This proportioned grace imbues the campus with a sense of peacefulness and gives it that monastic quality which Johnson was trying to convey. Recently Mr. Johnson enclosed the academic mall on the north end with his Chapel of St. Basil which was completed in 1997. The chapel is "more complicated formally than Johnson's earlier buildings and much more aggressive in its scale, mixture of materials, and decoration" (Fox, 73).

Rice University

Hidden behind a landscape of perfectly sculpted oak trees lies the next campus we visited – Rice University. Designed in a Byzantine-influenced Mediterranean style, Boston architect Ralph Adams Cram's carefully laid out plan for Rice University is "one of the most inspired episodes in the history of twentieth century American eclecticism" (Fox, 108). Cram deferred to the hot humid environment when designing his buildings which are long and thin, with lots of windows to allow for the prevailing breeze (Fox, 108). According to Fox, Cram was trying to imbue the university with its own tradition. The Administration Building, now called Lovett Hall after Edgar Odell Lovett, the first president of Rice, is the embodiment of tradition with its fortress like façade embellished with cut stone and mosaics. The elegant arched portal of Lovett Hall, which acts as a gateway to the main academic court, adds a sense of grandeur to the place, as do the cloistered passages on either side of the main arch. By varying "the pattern of window openings" on the back façade of Lovett Hall, Cram offers visual clues to the "internal arrangements" (Fox, 108). The right side of Lovett with its wide windows was designed as a meeting hall. The left side, which has fewer and narrower windows, housed the original library.

Lovett Hall

Next to Lovett Hall and linked by cloisters is the Physics Building (1914) also, by Cram, Goodhue & Ferguson. Upon close inspection of the building one notices the enormous attention to detail. "Cram varied the degree and character of architectural decoration on the exteriors of this three-part building to relate its faces to different sectors of the campus" (Fox, 108). The arches facing the Academic Court almost imperceptibly decrease in size from the middle to the ends. These arches also offer clues to the interior and lend a monastic quality to the building. The entrance to the building with its scalloped shell shapes and pedestals is known as the whispering wall. This enclosure has such perfect acoustics that two people standing on either side of the entrance can whisper a conversation that can only be heard by the parties themselves. The interior of the Physics Building reminded me of being in some Ivy League school or even Oxford University. In the center of the court is a statue of William Marsh Rice (1816-1900), who was a merchant, financier and philanthropist. In 1891, Mr. Rice endowed and incorporated the university for the advancement of literature, science and art. His ashes are buried beneath the statue of him holding a blueprint of the university in one hand and a book in the other.

Physics Building

The University of Houston (Main Campus)

If the University of St. Thomas and Rice University are what you get when you have strong artistic vision and a more unified plan, the jumbled mish mash of buildings located on the University of Houston's (UH) central campus seems to be what you get when you lack a unified vision. Whereas the former universities blend into their neighborhoods, the UH campus practically ignores theirs. Walking through the university on a tour and on many other occasions, I always get a feeling of alienation. There seems to be no center to the campus and it lacks a collegiate feeling. It's like the play *Six Characters in Search of an Author*; only in this case, it's like sixteen buildings in search of a campus. According to Phillip Lopate, a former English professor at the University, "the strongest impression the campus made (on him) was of a system of parking lots and roadways – with a collection of undistinguished institutional buildings, mostly from the forties, fifties, and sixties, that served as raison d'etre for the parking" (Lopate, 19). Mr. Lopate attributes the unaffecting environment on the campus to the fact that the university is a commuter college. Many students just park, attend classes and leave.

Ezekiel W. Cullen Building

Touring UH with our class, I was, however, able to gain a better perspective of what was once the original plan for the campus. For example, the first stop on our tour of the campus was the modernistic Ezekiel W. Cullen Building, "a tall, frontal central block flanked symmetrically by low wings" (Fox, 151). Ezekiel W. Cullen was a legislator who sponsored the Cullen Act, which started land grant endowments for public schools and universities thus laying the groundwork for a Texas public education system. (Long, *The Handbook of Texas Online*, 14 Apr 2002). This building, designed by Alfred C. Finn in 1950, acts as the university's "architectural set piece." It overlooks a fountain pool and is decorated with "shell limestone facing, allegorical relief sculpture, and decorative cast aluminum" (Fox, 151). The Cullen building is mirrored on both sides by a "pair of shell limestone-faced, tile-roofed buildings" with art deco accents that were part of the original campus plan by Hare & Hare (Fox, 151). The whole arrangement of these buildings with its defined quadrangular space makes this part of the campus feel coherent, rather than haphazard. If the campus has a center, this could be it.

The last building we visited on UH campus and the place where our classes are conducted is Philip Johnson's Architecture Building built in 1986 and considered by Fox to be the university's new set piece. This building helps me feel situated on campus. The stone temple which crowns the building can be seen from almost anywhere on campus, making it a good compass for at least the architecture students. The design of the building is based on the "18th-century French architect C.N. Ledoux's never-built...House of Education in the ideal town of Chaux." As is usually the case with Johnson's style of architecture, the building definitely succeeds in drawing attention to itself. I guess what I came away with from our tour of UH is that all the different buildings do not speak the same language. Each is so different in design that it's difficult to get the sense of continuity that you do on Rice University campus. But maybe that's the charm of the campus, the fact that it's such a jumble, like the city for which it is named.

Architecture Building

I was excited to learn that the University of Houston central campus is currently embarking on a major renovation and expansion project. A new student center will be built and $41.5 dollars has been earmarked for the M.D. Anderson Library. "The proposed project will expand the library from its current 300,000 square feet to 455,000 square feet. A new wing will be added to the south side of the current library building facing Wheeler Street" (Tommaney, *UH Campus News*, 3 May 2001). In addition, the money will be used to make the library state of the art in technology and electronic information. The expansion is being designed by Morris Architects of Houston and Shepley Bulfinch Richardson & Abbott of Boston. I plan on inviting a Morris architect to come share their plans for the expansion with my students and talk about the changing function of the university library of today.

At the end of my curriculum unit on Houston architecture, I would like my students to see that architecture in Houston is a reflection of its people, culture and history as well as a practical and functional art that affects our daily lives. When they look at a building, I want them to try to interpret it the same way that we have in our class with Stephen Fox. I want them to see that we can see and read our history in those very buildings. For as T.S. Elliot said,

> Time present and time past
> Are both perhaps present in time future
> And time future contained in the past.

This quotation reminds me of our last tour with Stephen Fox, where we were able to see a timeline of Houston's architectural history through its downtown buildings. At the end of this unit, I hope my students will gain an appreciation for the history of their city and maybe seek to preserve it for future generations.

RATIONALE AND LESSON PLANS

Whereas in the first part of my paper I was trying to provide a narrative of the places we visited as a class which tell the story of Houston architecture, the second part of my paper will focus on the teaching strategies and lessons that will be used to convey the knowledge I gained from this course with my students. As I set out to design this portion of my unit, I asked myself why should fourth and fifth grade elementary students study architecture? These students come to the library four times a week, for one hour each day for one month as part of their ancillary rotation. How can I rationalize teaching them about architecture when my job is to teach them how to use the library to become information literate? I decided that one of the ways I could combine the library objectives I am required to teach with my unit would be to design lesson plans which show students how the library can be used to study any subject in-depth – in this case architecture. Through their study of architecture, students will see and learn firsthand how to use many library resources. By teaching this unit, I will be able to teach my students to conduct research with a purpose rather than teaching the technique theoretically. Therefore, some

of my lesson plans will include the use of research tools such as encyclopedias, online databases and catalogs, books on Texas history, and architecture books for children. The unit will be one month in length since that is the amount of time students are scheduled to come to the library, but can be adapted by other teachers to fit their class schedules. The unit can also be adapted to teach upper grade levels or used in the classroom by teachers in collaboration with their librarian.

In addition to developing my students' information literacy, I hope that my unit on architecture will help promote their visual literacy as well. One of the books I consulted to help me design my unit is entitled *Architecture is Elementary* by Nathan B. Winters. Mr. Winters believes it is imperative that students be given the chance to develop their visual literacy. According to Winters, visual literacy is "the ability to perceive objects in space, to use and comprehend graphic languages such as maps, blueprints, diagrams, drawings, models and three-dimensional illusions. It is the ability to see and recognize visual order...expression and beauty" (xi). In order to develop their visual literacy, I will be designing lesson plans which engage the abilities listed above. For example, one of my lesson plans will involve using drawings and diagrams to design the library of the future. In another, I will invite architects to come speak to my students, and ask them to bring drawings and models of buildings they have designed so students can see the methods used in architecture.

Finally, Mr. Winters states in his book *Architecture is Elementary* that "each generation has a duty to improve upon the present and future environments" (x). By studying and viewing examples of premiere architecture in Houston, students can become part of the next generation Mr. Winters envisions, one that insists on a quality environment. Furthermore, Mr. Winters states that "architecture is closely related to and involved with many disciplines, including history, science, math, engineering, art and aesthetics, social studies, psychology, philosophy, computer science, and law" (xii). I think that any subject that encompasses so many different fields will definitely benefit my students' intellectual growth and development. To sum up, my purpose in this curriculum unit is threefold:

- To heighten student awareness of architecture and the role it plays in society;
- To develop students' visual and information literacy; and
- To explore the present, past and future of Houston through its buildings.

ARCHITECTURAL FORMS FROM THE TWENTIETH CENTURY

Lesson One

Objective

Since the thesis of the narrative portion of my unit was to show how one can read a building like one does a book, I will use this lesson to develop my students' ability to

read or recognize different architectural forms from the twentieth century. The following lesson plan has been adapted from one in Mr. Winters' book entitled "There are specific visual clues to identifying styles, themes, periods, and movements in architecture." The period I will focus on in this lesson will be the twentieth century since most of the buildings we toured were built during this period. One of the library objectives I will be meeting as I teach this lesson is to show the students how to use online databases and electronic catalogs in the Library Media Center (HISD Benchmark for Libraries 4.9.C/5.9.C, *Library Scope and Sequence*).

According to Mr. Winters, "we can learn a lot about a people, their history and their culture by being able to recognize and identify styles, themes, periods and movements in architecture" (72). He compares recognizing architectural periods to putting the pieces of a jigsaw puzzle together. Just as we use colors and shapes to fit the puzzle together, buildings and structures provide visual clues that can help one determine to which architectural period they belong (Winters, 72). During our tour of downtown, Stephen Fox would ask us to guess which period a building belonged to based on its visual clues. Mr. Fox shared that certain time periods can be inferred by the material the architect used. For example, a kind of yellowish brick was fashionable in the 1930s and can be seen on a few of the buildings in downtown Houston. In this lesson, students will use the visual clues and symbols of a building to help them determine its style or form.

The four basic design approaches Mr. Winters describes are organic, international/mechanical, sculptural, and art deco or art nouveau. These approaches arose in the early 1900s. Each design approach is characterized by certain key elements which will be described below. In addition to the examples of each form provided by Mr. Winters, I intend to show students examples of each approach in Houston through the pictures I've taken using a digital camera. Structures in Houston which I described earlier in my narrative and which I think fit the description of each form are listed after Mr. Winters' examples.

1.) "Art Deco (1930) - Geometric linear decoration of surfaces.
Example: Chrysler Building, New York City; Van Allen, 1930" (107).
University of Houston Ezekiel W. Cullen Building (1950) Alfred C. Finn.
2.) "Organic (1937) - Materials and forms harmonize with nature, wood used as wood, stone as stone.
Example: Falling Water, Bear Run, Pennsylvania; Frank Lloyd Wright, 1936-1939" (107).
Science and Research Building, University of Houston (1968) Mackie and Kamrath.
3.) "Sculptural (1950) - Concrete masses in more or less 'free forms.' Curvilinear decoration, thick window openings placed visually.
Example: Notre Dame du Haut, Ronchamp, France; Le Corbusier, 1950" (107).
Chapel of St. Basil (1997) Phillip Johnson.
4.) "International/Mechanical (1952) - Steel and glass boxes. Architecture is a 'machine in which we live.' Block slabs – very rectilinear. No decoration on surfaces. Flat

roofs.
Example: School of Architecture and Design-Crown Hall, Illinois Institute of Technology, Chicago; Ludwig Mies van der Rohe, 1952" (107).
Welder Hall, Jones Hall, and Strake Hall; University of St. Thomas (1958, 1959) Philip Johnson Associates with Bolton and Barnstone.
Brown Pavilion and Cullinan Hall, Museum of Fine Arts Houston (1954); Ludwig Mies van der Rohe.

Activity

After I describe the approaches and show drawings of the famous examples listed above, the students will be divided into four groups. Each group will be assigned an approach to research online. The groups will look up pictures of the real buildings listed above on the Internet using various search engines as well as three more examples of each type. The students will have to tell why they think a particular building fits their assigned form based on its appearance or visual clues. A particular site I found which the students can use to complete this assignment which has a directory of over 750 buildings is called *Great Buildings Collection*. The students will also look for examples of each approach in old architectural magazines and books. The magazines can be cut up to create a collage of the key features of each approach. I would also like each group to draw a building with visual clues which illustrate their category in order to help them develop their visual memory. The students will then share their results with the class during group presentations.

Resources

Winters, Nathan B. *Architecture is Elementary: Visual Thinking Through Architectural Concepts***.** Salt Lake City: Gibbs M. Smith, Inc., Peregrine Smith Books, 1986.

Materials

Architectural magazines, computer databases, pictures of Houston buildings from lesson.

PAST, PRESENT & FUTURE LIBRARIES

The purpose of the following three lessons is for students to become aware of the changing face of libraries throughout history to the present and on into the future.

Lesson Two: Libraries of the Past

Objective

The students will use online databases, electronic catalogs, encyclopedias (both print and electronic), and experts in order to research what libraries used to look like and the purpose they serve in society (*HISD Library Scope and Sequence*, 1999). Throughout this lesson on libraries of the past, present and future, I will demonstrate through mini-lessons how to use each of the above library resources thereby increasing their information literacy skills. Students will also visit a library from the past during a field trip to the Julia Ideson Building.

Activities

As an introduction to this lesson, I will talk about what the first libraries looked like with my students. Before I begin my discussion, I will ask them to surmise what books may have looked like prior to the invention of the printing press. The students will brainstorm their ideas in groups, write them down and share their responses to the above query with the class. After discussing the ways that people collected and preserved knowledge in the past, students will then be asked to guess how past collections were stored. Next, students will conduct research using electronic encyclopedias and print ones to learn about the first libraries, how they used to operate and what they looked like. In this way, they will see how what goes inside a library determines what a library looks like.

For example, the Great Library of Alexandria was thought to have 500,000 papyrus scrolls. Students will be shown what a real papyrus scroll looks like and asked to design a library that could hold these scrolls using cardboard boxes or whatever other material they can think of. Students will be working in groups throughout this lesson. Some questions I want students to consider as they research libraries from the past are: What did they look like? How does the collection that goes inside the library shape the way a library looks? In the past, there was no air conditioning. How did this issue influence the way a library was designed? What material was used to build libraries in the past? How were past collections stored and preserved?

At the end of the lesson, the students will go on a tour of the Julia Ideson Building to see what a library from the past actually looked like, how books were stored in it, and how the issue of air conditioning affected its design. Prior to their visit, the students will research Julia Ideson through online databases and view digital images of the library.

Resources

Books on libraries, electronic catalog, encyclopedia (print and electronic) and online databases.

Materials

Paper, cardboard, glue, scissors, papyrus scrolls, toilet paper rolls.

Lesson Three: Libraries of the Present

Objective

The students will be asked to consider the purpose, function and design of present day libraries with a particular focus on school and university libraries (Benchmark for Libraries 4.4.A and 5.4.A, *Library Scope and Sequence*). The students will also learn how to draw floor plans and identify the different areas of the Library Media Center (Benchmark for Libraries 4.1.A, 4.6.A, 5.1.A and 5.6.A, *Library Scope and Sequence*).

Activities

At the beginning of this lesson, I will ask students to think of all the libraries they have visited including school libraries. Some questions I want them to consider as we discuss current libraries are as follows: What do they like best about the libraries they have visited? What do these libraries look like? How are the collections arranged? Does the layout of the library confuse them or help them find what they are looking for? What about the computer stations? Are they easy to use and readily available? How do they feel when they visit the library?

Next, I will show them several sample floor plans of HISD libraries and list some of the factors an architect has to consider when designing a library media center for a school such as acoustics, carpeting, electrical wiring, climate control, lighting as well as specifications for built-in equipment such as shelving and storage areas and of course location and square footage requirements (Haynes, 5). After students view the sample floor plans, I will have them draw a floor plan of our school library and label all of the different areas. This activity has a dual purpose; to teach them how to draw a simple floor plan and to help students identify and locate important areas of the library media center (Orientation 5.1.A and 12F, *Library Scope and Sequence*). In order to familiarize students with how to draw plans, I will use a lesson in Robert Gardner's book *Architecture*. The lesson in the book is entitled "Making Plans" and it explains how length and width are scaled down to create actual dimensions and how to show where windows and doors will be placed. This portion of the lesson could be completed in collaboration with the math or science teacher in order to reinforce how to measure length and width.

Next, students will be asked to draw another plan showing how they think our library should be arranged to better meet their needs. Where would they place student tables, computers, sofas and circulation center? What would make it easier for them to locate books in the library? How would they label the different areas of the library? What types of signs or pictures would they use? How would they arrange the fiction, nonfiction, reference and easy books sections of the library?

At the end of this lesson, the students will go on a tour of the Jesse H. Jones library to see what the library of today looks like. The students will be asked to fill out a checklist on the appearance of the library as they tour the outside and inside. During their visit to the Jesse H. Jones library, I will try to arrange a visit with the director of the library, Barbara Gubbin. I will ask her to discuss the issue of the future of the Houston Public Library with my students especially considering technology. In this way, students will be prepared for the final lesson in my curriculum unit. Students will have questions prepared beforehand to ask Ms. Gubbin and take notes during their visit with her which will fulfill their requirement to learn how to interview experts in order to build their research skills.

Resources

Gardner, Robert. *Architecture*. New York: Twenty-First Century Books, 1994. pp. 23-24. Activity 4: Making Plans.

Lesson Four: Designing the Library of the Future

Objectives

The students will use all of the information they have gained from this unit to help them design the library of the future. This lesson will also provide a means of assessing my students on what they have learned. The students can complete the assignment in pairs or work alone.

Activities

"Will public libraries continue to exist in this millennium? If they do, what will they be like? Will they simply be warehouses of old books? Irrelevant to anyone under 20?" ("Library of the Future Launched in Richmond B.C.," *Richmond Public Library: Ironwood Branch,* 6 June 2002). These are some of the questions I will ask my students as they set out to design their version of the library of the future. At the beginning of this lesson, I will ask also students to recall some of the issues discussed with the director of the Houston Public Library concerning future libraries. As the students recall the issues, I will write down their responses.

Next, I will share with students some outstanding examples of modern libraries being built today. I will show students a picture of each library via its Internet website and project the image onto a pull-down screen using an LCD projector. Following is a list of libraries that I plan to share with my students:

- The new Seattle Public Library designed by Rem Koolhaas
- The San Antonio Central Library designed by Ricardo Legorreto
- The Phoenix Central Library designed by Will Brudder

- The University of Houston M.D. Anderson Library expansion and renovation plans designed by Shepley, Bulfinch Richardson & Abbott of Boston and Morris Architects
- The Richmond Public Library's Ironwood Branch in Vancouver B.C.

As students view each of the above examples I will ask them to sketch or note features that they like and dislike about each one for future use when they design their own library. One website in particular which I plan on sharing with students is the Richmond Public Library Ironwood Branch site which I quoted above. This website has a PowerPoint presentation which discusses how the Richmond library, "complete with a 20 seat computer training centre, 39 designated Internet stations, and digital Reference centers for adults and kids," was designed to meet the needs of an ever-increasing technological society (6 June 2002). It is a fine example of combining technology with the written word to create an inviting environment, one which may prove to be the model for future libraries.

In addition to exposing my students to groundbreaking concepts in new libraries via the Internet, I will invite an architect who is working on the current M.D. Anderson Library expansion at the University of Houston to come discuss their plans and share some models of what the completed library will look like as well as talk about the skills and education required to become an architect. I will also share the library plans which are posted on the University of Houston website with my students.

Next, my students will design their version of the future library. They will need to project into the year 2050 for their libraries. It can be any type of library they want – virtual, real, in space; the sky's the limit. It can be a university, public, school or bookstore/library. I want my students to let their imaginations run wild when designing the library of the future. I also want them to think about how future information will be stored and if we will still be reading bound books. Their designs can combine all three types of libraries – past, present and future – into one museum quality library. The students will need to turn in a drawing of their library using a computer drawing program such as Adobe or CAD. I will try to collaborate with the technology teacher to see if he can help students in the computer lab with their designs. The students can also turn in a miniature model of their library if they like. The students will need to turn in an essay describing their library along with the types of material it will hold. Students' grades will be based on the amount of thought, time and imagination which they used to design their library along with how well they express their rationale for the library in their essay. I will allow the students one month to complete the project.

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Adams, Celeste Marie, ed. "The Museum of Fine Arts, Houston: An Architectural History, 1924-1986." In *The Museum of Fine Arts Bulletin* 15 (Winter-Spring 1992): 11.

El-Dahdah, Farès. "Shedding Light on the Beck." *Cite 47* (Spring 2000): 18-20.

Endelman, Sharon Bice. "Ideson, Julia Bedford." *The Handbook of Texas Online* (14 Apr 2002). http://www.tsha.utexas.edu/handbook/articles/view/II/fid1.html.

Fox, Stephen. *Houston Architectural Guide*. 2nd ed. Photographs and editing by Gerald Moorhead, FAIA, and Yolita Schmidt. Houston: The American Institute of Architects/Houston Chapter and Herring Press, 1999.

Gardner, Robert. "Activity 4 – Making Plans." In *Architecture*, 23-24. New York: Twenty-First Century Books, 1994.

Haynes, Dorothy Elizabeth. *Planning the Library Media Center for the 1990s and Beyond*. Austin: Texas Education Agency, 1991.

Houston Independent School District, Department of Library Services. Chapter 6: "Planning the Library Media Center Facility for the 1990s and Beyond" and Chapter 7: "Library Scope and Sequence 1999." In *Creating the Library of the Future*.

———. *Library Scope and Sequence*. 1999. http://dept.houstonisd.org/librarysvcs/Scop&Seq/Scope&Sequence.htm#Benchmarks%20for%20LMC-4th%20Gr

The Houston International Festival 2002: Teacher Curriculum Guide, 146.

Kilian, Karl. "Flashback to the Sixties: University of St. Thomas." *Cite 35* (Fall 1996): 22-23.

Long, Christopher. "Cullen, Ezekiel Wimberly." *The Handbook of Texas Online* (14 Apr 2002). http://www.tsha.utexas.edu/handbook/online/articles/view/CC/fcu5.html.

Lopate, Phillip. "Hall of Lively: University of Houston Central Campus." *Cite 35* (Fall 1996): 19-20.

McBride, Elizabeth. "Inside the Houston Mirage." *Cite* (Fall 1987): 16-17.

Museum of Fine Arts, Houston. "The Beck Building and the Law Building: A Dialogue between Two Great Architects" *MFAH Beck Building* (4 June 2002). http://www.mfah.org/Beck/architecture.html.

Patenaude, Lionel V., "Jones, Jesse Holman." *The Handbook of Texas Online* (14 Apr 2002). http://www.tsha.utexas.edu/handbook/articles/view/JJ/fjo53.html.

Richmond Public Library: Ironwood Branch. "Library of the Future Launched in Richmond B.C." (6 June 2002). http://www.rpl.richmond.bc.ca/rplinfo/ironwood.

Shields, Mitchell J. "Reading Room." *Cite 51* (Summer 2001): 21-25.

Thorne, Martha. "Moneo's Museums." *Cite 47* (Spring 2000): 20-21.

Tommaney, Susie. "41.5 Million Library Construction Plans Take Shape." *UH Campus News*. Vol. 5, no. 37 (3 May 2001). http://www.uh.edu/uhcnonline.

Winters, Nathan B, author and illustrator. *Architecture is Elementary: Visual Thinking through Architectural Concepts***.** Salt Lake City: Gibbs M. Smith, Inc. Peregrine Smith Books, 1986.

ANNOTATED BIBLIOGRAPHY

Many of the following titles were selected because they are part of our school's library collection, which makes it easier for students to access them.

Teacher Resources

Adams, Celeste Marie, ed. "The Museum of Fine Arts, Houston: An Architectural History, 1924-1986." In *The Museum of Fine Arts Bulletin* 15 (Winter-Spring 1992): 11.

This book provides an excellent visual and historical account of the building of the Museum of Fine Arts. It includes photographs and blueprints of the original building and will help my students better visualize my description of the museum.

Fox, Stephen. *Houston Architectural Guide*. 2nd ed. Houston: The American Institute of Architects/Houston Chapter and Herring Press, 1999.

A comprehensive catalogue of architecturally significant buildings and places in Houston. It is illustrated with photographic images. This book was my bible throughout the course and is the backbone of my unit.

Gardner, Robert. *Architecture*. New York: Twenty-First Century Books, 1994.
This book investigates the science and technology of architecture and offers many hands-on activities to better understand the basic principles behind architecture. Excellent resource for both students and teachers.

Grimshaw, Caroline, creative and editorial director. *Buildings*. New York: Two-Can Publishing Ltd., 1995.
This book provides an excellent introduction to buildings and their functions. It provides a photographic history of architecture and presents it in an easy-to-follow format that will help students better understand the role of architecture in society. Text by Iqbal Hussain. Illustrations by Nick Duffy, Spike Gerrell, and Jo Moore.

Isaacson, Philip M. *Round Buildings, Square Buildings, and Buildings That Wiggle Like a Fish.* New York: Alfred A. Knopf, 1988.
I absolutely adored the poetic descriptions and stories of famous buildings in this book and the accompanying glossy photographs taken by the author. This book will help students develop a true appreciation for beauty in architecture and maybe arouse a desire to visit the places described. It can also be used to inspire students to consider architecture as a career. For in the words of the author, "a very good architect can fashion poetry from buildings, just the way a writer fashions poetry from words" (45).

Paine, Roberta M. *Looking at Architecture.* New York: Lothrop, Lee & Shepard Co., 1974.
An introduction to architecture which examines some of the great buildings from all over the world and provides short biographies of famous architects throughout history as well as a glossary of building materials such as clay, glass and stone.

Shields, Mitchell. "Reading Room" *Cite 51* (Summer 2001).
This article will help me better explain the history of the Houston Public Library and its branches as well as the issues facing the central library today as it tries to build for the future.

Winters, Nathan B, author and illustrator. *Architecture is Elementary: Visual Thinking through Architectural Concepts***.** Salt Lake City: Gibbs M. Smith, Inc. Peregrine Smith Books, 1986.
This book is filled with activities designed to develop students' visual and historic literacy. Many of the activities can be adapted by teachers for the classroom or completed by students on their own. This book outlines important concepts used by architects at levels applicable to adults and children alike.

Student Resources

Ames, Lee J. *Draw 50 Buildings and Other Structures*. New York: Doubleday, 1980.
This book offers a step-by-step guide to drawing famous buildings such as the Empire State Building, Leaning Tower of Pisa, Big Bend, Taj Majal and Transamerica Building. By learning to copy great structures, students can improve their drawing techniques and be inspired to design their own building. This book will help hone their drawing skills.

Adams, Celeste Marie, ed. "The Museum of Fine Arts, Houston: An Architectural History, 1924-1986." In *The Museum of Fine Arts Bulletin* 15 (Winter-Spring 1992): 11.
See **Teacher Resources**.

Fox, Stephen. *Houston Architectural Guide*. 2nd ed. Houston: The American Institute of Architects/Houston Chapter and Herring Press, 1999.
See **Teacher Resources**.

Gaff, Jackie. *Edificios, Puentes y Tuneles* Translated by Luis Ogg, Susana Constante and Alejo Torres. Leon: Editorial Everest, S.A., 1993. Originally published as *Tell Me About Buildings, Bridges & Tunnels* (Grisewood & Dempsey Ltd., 1991).
The Spanish version of this book is in our library. I will use it to help my ESL and bilingual students understand the terms being discussed in my unit. This book has detailed drawings of famous structures as well as in-depth descriptions of how they were built. It is written in a simple question and answer format.

Gardner, Robert. *Architecture*. New York: Twenty-First Century Books, 1994.
See **Teacher Resources**.

Grimshaw, Caroline, creative and editorial director. *Buildings*. New York: Two-Can Publishing Ltd., 1995.
See **Teacher Resources**.

Isaacson, Philip M. *Round Buildings, Square Buildings, and Buildings That Wiggle Like a Fish.* New York: Alfred A. Knopf, 1988.
See **Teacher Resources**.

Macaulay, David. *Cathedral: The Story of Its Construction*. Boston: Houghton Mifflin Company, 1973.
This richly illustrated book offers a step-by-step guide to building a gothic cathedral. The details are graphically explained from the building of the foundation to the completion of the towers. It will give students an idea of the enormity of the task of building a large structure as well as the amount of time and labor involved in the task.

———. *City*. Boston: Houghton Mifflin Company, 1974.

I like this book because it is based on how the Romans went about planning an ideal city. The book's pictures describe how to plan a city to include houses, shops, public squares and temples as well as how streets, sidewalks, and sewer systems were designed to better serve those who lived and worked within city walls. The need for city planning is greater than ever especially in modern cities of today. A look back in history at the buildings in Roman cities can give another perspective on the city of today. The ideal city described in the book can be compared with Rice University, which is described in my unit as being somewhat like a Roman city in its plan.

Paine, Roberta M. *Looking at Architecture.* New York: Lothrop, Lee & Shepard Co., 1974.

See **Teacher Resources**.

Winters, Nathan B, author and illustrator. *Architecture is Elementary: Visual Thinking through Architectural Concepts***.** Salt Lake City: Gibbs M. Smith, Inc. Peregrine Smith Books, 1986.

See **Teacher Resources**.

Web Resources

http://www.sanford-artedventures.com/play/arch1/index.html

Carmine's Introduction to Architecture

Students will enjoy this interactive site which allows them to actually design their own structures. This site is easy to maneuver and gives students a chance to use their inferencing skills as they answer questions based on the form and function of architecture. I plan on using this site as a way to introduce students to architectural concepts and design at the beginning of my unit.

http://www.greatbuildings.com/gbc/buildings.html

Great Buildings Collection

Students can use this international and historical directory of buildings to help them look for examples of architectural forms from the twentieth century during Lesson One in my unit. They can also use it to look at different libraries throughout the world for my remaining lessons.

http://www.ncounty.net/aerc/

Architectural Education Resource Center (AERC)

The mission of (AERC) is to encourage children to express their ideas through the architectural design process. Any teachers looking for engaging lesson plans for elementary students will find this site indispensable.

http://www.artsednet.getty.edu/ArtsEdNet/Resources/Sampler/b.html
Spaces and Places (Grades 3-5)

The lessons in this site give students an opportunity to actually interpret architectural spaces. They also show how geography and environment influence an architect's plans.

http://www.nbm.org/Education/Educator/guides.html
National Building Museum in Washington D.C.

Even if you don't live in Washington this site provides teachers with excellent pre- and post visit activities that can be adapted for classroom use. For example, I am going to use a worksheet they provide which has a checklist students can use when they go on field trip as part of my unit. The checklist forces students to carefully examine a building many features.

http://www.rpl.richmond.bc.ca/rplinfo/ironwood/
Richmond Public Library's Ironwood Branch

I like this sight because it shows how technology and books can combine to create an inviting space for library patrons. It also has numerous links to articles on libraries of the future and a PowerPoint presentation describing how Ironwood Library is the future of libraries. Students can use this sight to help them with their own plans for the library of the future.

http://www.tsha.utexas.edu/handbook/online/
The Handbook of Texas Online

I found this site invaluable for researching the names of influential Texans.

Other Resources

Phoenix Central Library. http://www.pac.lib.phoenix.az.us/web
Seattle Public Library. http://www.spl.lib.wa.us
The University of Houston M.D. Anderson Library. *University of Houston Campus News*, vol. 5, no. 37. 3 May 2001. http://www.uh.edu.uhcnonline/library-1.htm.

Adobe, CAD programs.