



Curriculum Units by Fellows of the Yale-New Haven Teachers Institute  
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## The Domestic House

Curriculum Unit 93.01.05  
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In recent years the power and influence of architecture has become more of a concern and topic for everyday people. Within our society the plight of vast numbers of citizens without permanent residences has become a major social issue. The failure of our social programs is evident by the “homeless” who in a progressive society are lacking a very basic human need. The crumbling buildings and ill-kept housing within inner cities have become a symbol of the decline of our urban centers and the flight of the middle class into the suburbs. Meanwhile, the new architectural wonder has become the “mall”. Its “meaning” and the psychoanalysis of its visitors have become fodder for numerous articles and talk shows. Also, for the first time in history buildings have been branded as the carriers and givers of respiratory and other diseases, and indeed, many buildings have been labeled “sick”. With the increase in crime homeowners have resorted to putting bars in front of their windows. Huge steel doors cover once illuminated store windows, and the days of people promenading downtown shopping areas to window shop has become an ancient privilege that few citizens can remember.

At first glance, it may seem questionable that this topic could be made palatable to elementary school children. I believe that as residents of the urban decay, and more often than not the residents of “sick” buildings, children will be able to identify with the changes in their environment and the beauty that is still around them in the city if they are introduced to some architectural concepts. At the heart of this curriculum is the underlining assumption that as with many things, we must take an often technical language and put it in terms that a child can understand.

Initially I would like to suggest that the children know more than we would think about architecture. Obviously they have an understanding of what home is and what it means to them. Some have dealt with home and the loss of it. Many have moved from place to place for various reasons. Many have more than one place they call “home” be it that of a divorced parent, or aunt, or grandmother. While they may not be familiar with the academic principles of architecture, they can already pick out the distinctive shape of the Eiffel tower, the statue of Liberty, or the Empire State Building. The Pyramids and an igloo are familiar structures and let us not forget the golden arches of McDonald’s which every toddler can immediately find along the highway.

Likewise, children have an early access and affinity to architecture and building through their play with beads, alphabet blocks, Lego and erector sets. On the beach they very early begin to make sand creations near the water’s edge. Spatial relationships and the development of abstract thinking through the use of real objects has long been advocated for young children. At the Bank Street School in New York City, which is highly regarded for its innovative curriculum and teaching strategies, a set of building blocks has long been a

permanent part of every classroom grades preschool through 4th grade.

My topic: "The Domestic House" would be part of the social studies curriculum in fourth grade which currently surrounds the study of the regions of the world. The topic could also be part of a study of the multi-cultural ancestry of America, or any regional study of other countries. Current emphasis is usually placed on understanding how the people of different regions manage to fill their basic needs of food, shelter, clothing, and transportation given the confines imposed upon them by the supply of natural resources, climate, and physical surroundings.

Since it is often difficult to have students relate to other cultures and earlier ways of life, the use of architecture seems to offer an intriguing way to enlighten as well as arouse students' curiosity. The study of architectural models and how they developed would provide a continuum which would enable students to see certain similarities and differences in the way cultures solve their problems.

There are three main objectives to the unit:

(1) Students will develop an understanding of the principles of Classical Architecture. Classical Architecture will be utilized as the basic "language" of understanding and appreciating the structures built by man. Students will become familiar with relevant terms and characteristics of this architectural genre. Local architectural achievements as well as famous structures will be studied as illustrative of classicism, or other genre that developed from classicism or independent of it. Topics will include the following:

- a. the 5 orders: recognizing the orders as the basic classical component of architecture.
- b. ornament: decorative elements, patterns and designs as found on the orders and in early man's use of tattoos, weaving and carving.
- c. basic terminology will be utilized not for mastery of terms, but to increase awareness of specialized language used in this area.

(2) Students will discuss the concept of a "house" and what it means to them. Great emphasis will be placed on the students formulating their ideas about what qualities they would like in a house.

In keeping with the current emphasis on a multi-cultural curriculum, it is suggested that the notion of house can easily lead the class into a study of different countries and/or cultures around the world.

(3) Since at this level it is especially important to do hands on learning the unit will culminate with the building of a structure by the child. The structure will be a house which shows use of some of the classical elements of architecture and ornamentation. Students will be provided with necessary supplies: clay, wood, cardboard, etc. to make their model. A written paper will also accompany each project describing the building and identifying the usage of the classical elements.

I suggest that we take the house as the primary element of architecture to which children can relate. For most people architecture is usually seen as a grandiose endeavor which produces a famous monument or one of those structures deemed an “important” building. It has been the case that our concept of architecture has normally ignored the houses and buildings the average person utilize in their daily environment. Amos Rapaport in *The House Form and Culture* argues that by seeing architecture as being the domain of genius designers and massive structures we have ignored the vast majority of buildings and a vital link in the total story of man and his efforts to build. <sup>1</sup>

Rapaport sees the building of a house as a combination of different phenomenon. Basically people with very different attitudes and ideas respond to the elements about them in different ways. In order to understand the house in different parts of the world one must not only take into account the physical factors of weather, site, and materials available but the socio-cultural ones. These include man’s ideals, desires, religion, his world view, and personal needs. Rapaport rejects some of the determinist views which solely emphasize the climactic, or religious element as the sole factor which results in a certain type of dwelling being in a certain area. As a matter of fact he goes to great lengths to show how houses often differ from what one would expect given certain conditions. <sup>2</sup>

In his book Rapaport stress that the socio-cultural are the primary influence on house structure. Houses are the physical embodiment of our ideal environment. For example, while religion exerts a great influence in the design of some houses it is not a universal characteristic and not to be taken as a given in all cultures. Although in many cases the evidence of religious influence is great it is Rapaport’s contention that it is extremist to view one factor as significantly more important than others and results in a very slanted explanation of the building process. <sup>3</sup>

In considering the domestic architecture of any area or culture the teacher would do well to include the following influences:

- a. climatic conditions
- b. methods of construction
- c. levels of technology available
- d. religious beliefs
- e. family structures
- f. social organization
- g. ways of earning a living
- h. social relations between individuals

Rapaport's ideas about the importance of the individual's world view and psychology in the design of houses can be related to the observations of Bloomer and Moore in the book *Body, Memory and Architecture*.<sup>4</sup> The authors consider how the individual begins to understand his/her "self" not only by the notion of mind but the recognition of body. As children we discover our world as separate things outside of our physical structure. We speak about our bodies using such terms as front, back, head, feet, heart, mouth, eyes, etc. We are oriented to the front of our bodies since most of what we experience goes on where we can see and do with our hands. It is not uncommon to spend more time fixing our hair in front and giving a cursory look to the back of our head. Likewise, we tend to look at ourselves in frontal mirrors, and a glance to the rear requires that we turn our head to the back. Thus, we often rely on others to tell us if our dress is unzipped, if our slip is showing, or if we have inadvertently sat on something.

The house is usually set in a dominating position on the property. The land upon which the home is built defines physically that invisible space which the individual "self" establishes as his/her own "personal" space. It is the area a foe may not cross before we take action, and a loved one may reach through to hug us.

Our faces carry two of our most important features our eyes and mouths. Our vision and how we see the world and our organ for speech and taking in food. These physical qualities we attribute to parts of our homes. The door is the symbolic mouth through which visitors pass and we communicate with the outside world. Having entered our domain, guests are ushered to the main room of the house where traditionally the hearth or "heart" of the family resides. It is the windows we look out through which we compare to eyes. Indeed their very position on the front of a house usually reminds us of the placement of human eyes on a face.

The front of the house or "face" receives our constant attention. It is the first thing which greets visitors and the perception of it influences those who pass by or enter. The formal entry to the house may be reserved for guests. Usually the front rooms are set aside for visitors so we will make a good impression.

Often family areas and the kitchen where most day to day living takes place is kept in the back. Most house hunters are impressed by the front of the house and the opening into it. Little regard is usually paid to architectural style in the rear of the house. Thus with the high cost of brick and stone many newer homes limit the use of these materials to the front or facing of the building.

The authors of both books see the emergence of modern architecture as a deviation from an orientation which was comprehensible in light of the physical nature of human beings and of their basic cultural milieu. We are missing that sense of order and understanding which we have for the classical structures and earlier building of this century. People do not feel a sense of caring or identification with the malls of today or some of the high rise apartments being built. The orientation which we have identified with is missing in most public buildings and some private dwellings. Indeed, it is often difficult to distinguish the front or back of contemporary buildings or where the main entrance is located. Thus the classical element of the grand entrance of a structure is now muddled and obscured. Rapaport finds it difficult to categorize much of the architecture in the new vernacular since we now prize originality over all else. Each architectural endeavor is a chance to be totally different from what has gone before. This leaves people in cold feeling buildings which radiate nothing but sterility and isolation.

After discussing the home and its relationship to the individual and his culture it would be profitable to establish a method in which to discuss actual pieces of architecture. Within our seminar it soon became apparent that we needed to have a common set of criterion to discuss this complicated subject. It was suggested that Classicism be used since it had certain established rules and offered us a "language" with

which to discuss buildings. Since classicism had come in and out of vogue and its elements were spread in many other types of architecture we found it useful to use this as a basis for discussion.

It may seem contradictory after setting out to discover the architecture of the masses to embrace Classicism which connotes large expansive and important buildings. I would suggest that Classicism fits right into the previously discussed notion of tradition and the self in architecture. The owning of a home has always been an important part of the American Dream. Home ownership is symbolic of the individualism and privacy that Americans seek. As one who has been perusing the home market in recent months, I can state that most of the newer homes are turning to classical and other traditional forms of architecture and incorporating elements of these within.

Victorian houses are once again popular and modern versions carry all the decorative elements that are seen on the homes in older historic districts. Gabled roofs, turrets, and elaborate trim are being reproduced. Many modern designs such as the raised ranch are being enhanced with columns. The once previous discarded front porch is now an element which people are requesting. There is no doubt about where the front entrance to these houses are as people use stone and brick for the facings, as well as for steps and walkways. Palladian windows and intricate trim and wainscoting are all being featured inside newer houses. All of these characteristics can be tied to earlier periods and styles of architecture.

I believe that this is a reaction to the impersonal architecture of the modern period. Builders rarely construct so called contemporary homes unless specifically requested. Buyers seem to be looking for tradition as well as individualism in their homes. There is a concerted effort by builders to make every house different within a development and to avoid the tired post World War II developments of uniform houses sitting in monotonous rows. The watch word in building seems to be that even the masses can have homes that reflect a sense of history and of self. The home can be customized to reflect the uniqueness of the owner. While most people will never own a home approaching the vast size or cost of the monumental structures of “great” architecture, they can have which contains some of the elements of greatness.

The achievement of Greek architecture has been permanently linked to the development of the three main orders: the Doric, Ionic, and Corinthian. Actually what we are talking about is the basic element of Greek building. The reason we begin here is the fact that Greek and Roman architecture were the first to have their characteristics and codes written about in great detail. (A short glossary of architectural terms and some illustrations are provided at the end of the unit.) The orders remained steadfastly similar from building to building and indeed it is the recurrence of these elements which have been seen as a type of language. <sup>5</sup>

The Doric is the oldest of the three having been developed on the Greek Mainland. The Ionic developed on the Aegean Islands and the coast of Asia Minor. The Corinthian is merely a variation of the Ionic. Vitruvius the Roman author furnished one of the earliest descriptions of the orders and first mentioned the Tuscan order which was thought to be the earliest and only type made of wood. It was Alberti in the fifteenth century who from his reading and observation of Roman remains came up with the 5th order—the Composite which features characteristics of both the Corinthian and Ionic. John Summerson in his book *The Language of Architecture* tells us that in correct order the development of the orders was Tuscan, Doric, Ionic, Corinthian and Composite. <sup>6</sup>

The columns were so regular in their appearance and in their use in the architecture of Greece that they came to be called orders. We refer to the order as the standard parts which make up the columns. The three main divisions are the stepped platform, the column, and the entablature. The column consists of the shaft which

has vertical grooves around it called fluting. The capital sits on the top of the shaft and is usually indicative of the column type depending upon its elaborate design. The five orders usually progress in their embellishment from the Tuscan simplicity to the very intricate Corinthian and Composite. Above the column is the entablature. On the sides of a temple the cornice is horizontal while on the short sides it encases the pediment between its upper and lower parts. <sup>7</sup>

The whole column was built of stone blocks precisely fitted together. The blocks were fitted together so that they would have smooth joints. If necessary metal dowels or cramps were used. Columns were built in sections called drums. The roof was usually made of terra cotta tiles supported by wooden rafters and wooden beams were used for the ceiling. <sup>8</sup>

The Greek belief in order and harmony gave rise to the orders. It is speculated that the column was not a unique product of the Greek culture but a seemingly natural result of man's early use of trees and other materials to make shelters. The column appeared earlier in Egypt and is a part of many cultures throughout the world. It is thought that its use did not spread from Greece but spontaneously occurred. Likewise, the pyramid which is found in many regions is not seen as exclusively an Egyptian innovation.

As wonderful as the Greek achievements in architecture were it is still speculated that in later years they failed to be able to improve upon the orders and that their natural limitations were coming into play. Perhaps the Greek love of order and harmony kept them from tampering with the orders. Nevertheless, it would remain for later cultures to expand the orders and adapt them to brick and concrete, and to arched and vaulted construction.

While the Romans borrowed much from other cultures they were nevertheless great innovators when it came to building. While concrete and the arch were known to the Greeks they made very limited use of either. The Romans on the other hand saw unlimited potential in these materials. Along with the development of the dome these materials allowed a flexibility never before achieved. It is because of these materials that the Romans were able to achieve unprecedented mass and size in their architecture. The Romans made walls of concrete—a mixture of mortar and gravel with small pieces of stone or brick, etc. and face it with small stones. This type of building had been invented in the Near East years earlier but the Romans were the first to use it to its fullest potential. <sup>9</sup>

Roman architecture's new forms based on arched, vaulted, and domed construction still paid homage to the Greek orders. If they were not relied on for structural use they were still symbolically there as decorative elements so that the post and lintel (beam) system was still the accepted tradition. Later changes would be made in the grammar of architecture, but it was always measured by how it differed or approximated the classical Greek ideal. Classical Greek architecture became the established system and on again and off again architecture has either returned to it or denounced it.

I hope that the reader can now understand why Classical architecture was chosen as a starting point. The few elements that encompass it can be explained and illustrated, and there are numerous examples of which can be found in our city. Certainly the architecture of our democracy was based on the Greek ideal so that a student need look no further than Washington D.C. to see classical architecture in America. There is not enough space in this paper to go around the world extrapolating classicism in other regions or its antithesis. What is being offered is a framework to start a discussion with.

When we speak of the orders we are harkening back to the earliest elements of building which were a

conglomeration of other civilizations which the Greeks had come into contact. The Greek ideal leads us back to Rapaport's idea with which I began that architecture is the result of man's dreams and his ideals about himself and his world. Classicism is composed of those elements which have throughout the ages struck a cord of recognition in many cultures throughout the world. That idealism is a perfect place to begin a study of our own history or of other people around the world.

The final topic I would like to discuss is ornamentation. Whether on cloth or buildings or in the weaving of tapestries etc., ornament has been present from earliest times. One of the basic ways we are able to identify different cultures is from the distinguishing ornamentation they use on their buildings and cloth, etc. Owen Jones, one of the respected writers on ornamentation, in his book: *The Grammar of Ornament*, studied the ornament of Savage tribes, the Egyptians, and the Greeks. He found that the presence of ornament was strong in the earliest of the Savage tribes. As a matter of fact ornamentation grows in a direct ratio to the growth of progress in the society. <sup>10</sup>

The early tribes created ornament from the tattooing of their faces whether for beauty or terror and on the designs in their wigwams. Jones found that the evidence of what he called "mind" or creative individualism was found more in the crude tribes attempt at ornamentation than in more sophisticated societies. Individuality decreases in a direct ratio when art is manufactured by a group effort. The true instincts of the early savages had a greater charm than that of the industrialized societies which might try to recreate it. The ornamentation of the Savage tribes was true to its purpose because it sprang from the natural instincts of its creators. Jones felt that much of modern ornament is too contrived and lacks this spontaneity. <sup>11</sup>

In one example of early ornamentation a simple triangle was the basic shape utilized to form a leaf pattern. As Jones sees it the success of all ornament is the production of a broad effect by repeating a few simple elements. Perhaps surprisingly to the reader, it is more effective to seek variety by manipulating a few simple elements in a design rather than utilizing a multiplicity of various forms. The Savage tribes used ornamentation in body tattooing, on the skins of animals, in weaving cloth, in reliefs and carving, and on their weapons of defense. Captain Cook noted the ingenuity of the islanders of the Pacific and South Seas. He marveled at the elaborate and intricate carvings they put on the sides of canoes and on the paddles. <sup>12</sup>

In discussing Egyptian architecture Jones found it peculiar to this style that the more ancient the monument the more perfect the art. In seeing modern displays of what remains of Egyptian art he saw it in a declining state. The purest Egyptian art was that early style which rose from central Africa (Ethiopia). Usually there is a rapid ascent from infancy to a peak level. When there is a mixture with other foreign influence a decline becomes evident. Egyptian art seems to have no infancy period and there is no evidence of foreign influence. They took their inspiration from nature. The lotus and papyrus growing on the banks of the Nile came to symbolize food for body and mind. Feathers of rare birds were carried before the king as symbols of sovereignty. The palm branch decorated temples, clothing, articles of luxury and of daily use from wooden spoons to boats. <sup>13</sup>

The Egyptians used polychromatic color. They painted everything in flat tints with no shade or shadow. The colors used were red, blue, and yellow with black and white to define and give distinctiveness to the various colors. Green was used as a local color for things like the leaves of the lotus. Secondary colors and hues were used later. A universal rule is evident in Egyptian art that in all archaic periods primary colors are prevailing while in periods when art is practiced traditionally and not instinctively the secondary colors and hues and shades of every variety are used. <sup>14</sup>

Greek ornamentation was borrowed from the Assyrians and from Egypt which was already in decline. They took an old idea and developed it in a new direction. Because it was not limited by religious laws and beliefs it was able to develop rapidly into a high state of perfection. It would later give rise to the future greatness which would be found in other styles. <sup>15</sup> Owen Jones believed that Greek ornament was wanting in symbolism. Since Jones' writings over one hundred and forty years ago many other historians have disagreed. Many experts believe that there was meaning to much of the ornamentation which we can only speculate about.

The picture of Greek architecture most people carry is that of a gleaming white building surrounded by white pillars. They were in fact painted with ornament and decorative sculpture. The colors most likely used were green with maybe some blue—gold or brown. The columns were so high that whatever their color it must have been distinctive in order to make them stand out. <sup>16</sup>

The final type of ornamentation that I would like to touch on is arabesque or Arabian. This is the outstanding feature of Islamic art. The designs are very complicated and may be geometric with star shapes and straight line patterns. It can be filled with circles and curving lines and ribbons that twist and turn and tie knots over each other. The design may take the shape of vines, leaves, and flowers. Arabesque often combines many kinds of patterns. Sometimes the designs are made into the shape of an animal whose tail is made of leaves or, whose back is covered with ribbons and bows instead of feathers or fur. <sup>17</sup>

Arabic letters were part of Islamic ornamentation. Since their beliefs restricted them to not imitate god by trying to reproduce the human form in any manner their religious art became concentrated on ornamental design. Beautiful writing (calligraphy) was considered the highest form of art by Muslims. They decorated the Koran—their holy book, with arabesques and calligraphy. The Muslims greatly respected the knowledge contained in books especially the Koran. They made book covers with a front and a back and an added flap to cover and protect the page edges. The covers were made of tooled leather often with gold and bright colors added. <sup>19</sup> I include this because bookmaking is something children love and presents added benefits to this aspect of the curriculum. One of the lesson plans on design suggested in this unit is centered on bookmaking.

<sup>18</sup>

The teacher might want to consider other types of ornament if another region or country is being studied, so that the unit can be expanded to include Japanese and Chinese ornamentation as well as a study of the Native American Indians and their use of design. One might also explore color and how their use can affect the observers perception and feeling toward architecture. Unfortunately there are not enough pages to cover all of these topics in depth.

The main thrust of this unit was to be domestic architecture. What has been provided is merely a prologue to the study. Since curriculum and textbooks change, I have been hesitant to tie this unit to the book currently used in the New Haven School System. However, currently the text used called *Living In World Regions* by Laidlaw provides analysis of the world regions and their native habitats. Whether one uses a standard curriculum or chooses to explore different countries chosen by the class it is hoped that this unit can be a jumping off point for looking at architectural achievements around the world and in your own backyard. After considering the child's own experience and feeling about architecture the teacher can continue with an around the world look at different cultures and their native houses and architecture. More famous buildings such as the Coliseum, Parthenon, Egyptian and South American pyramids, as well as, the Arch in St. Louis, and the modern skyscraper might be contrasted with the native architecture produced for the mass population. Always, however, the classical elements would be a language students can use to explain similarities and differences—to gauge the use of tradition over the purely innovative.



Finally, the unit proposes a hands on project which will allow the students to build their own houses. I believe this to be the most important part of the unit for it will be both challenging and a defining moment for this curriculum. With the successful building of their own houses incorporating some of the elements they have encountered, students will have completed a unit of study which introduced some new ideas and allowed them to showcase their creativity.

## **SAMPLE LESSON PLANS**

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### **Sample Lesson #1—The House as Human**

#### ***Objectives Students will be able to***

1. identify examples of personification
2. draw a series of pictures illustrating their houses from the, back, and top.
3. recognize and discuss the use of positional words and human qualities in houses.

***Note to the Instructor Prior to beginning the unit you may want to have a bulletin board containing pictures of different houses and labeled with the position words. Perhaps a title of “Houses are Human Too” or “Your House—A Living Thing.” When students finish their drawings and narrations they can be hung on the bulletin board to begin the unit on a high note.***

***Materials Needed paper, crayons, pencils, paper***

***Vocabulary personification, positional words(front, back, top, side)***

#### ***Procedure***

1. Begin by discussing a story which uses personification such as one of Aesop’s fables. Ask the students if animals can really talk. Do these characters act like animals we know? It is a good idea to have them generate a webbing of similar examples they know when animals or objects have been made to act human. After they have shown a grasp of the concept you can tell them that this technique is often used in storytelling and it is called personification.
2. Tell students that many experts think that houses are like people. Go on to suggest that the same positional words we use to refer to ourselves are also used in speaking about houses. Refer to your bulletin board or else utilize a teacher illustrated example mounted on tagboard.
3. Give children a piece of drawing paper split into four sections. Have the children label the top “My House”. Then have them label each section front, back, side, and top. Ask the children to draw their house from each angle. After this is completed have each child take a pencil and lined paper and write about their house describing what features they like and what they would change

about it.

4. After children have completed this assignment have them share their work with the rest of the class and then hang the papers and drawings of those who wish to exhibit their work.

## Sample Lesson #2—The Five Orders

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### **Objectives** *Students will be able to*

1. locate Greece on a map.
2. learn something of Greek life and culture
3. recognize that the Greeks utilized basic lintel and beam construction.
4. recognize the use of columns as a basic element in Greek construction.
5. recognize the use of these basic constructions in their school, home, or neighborhood.

**Note to the Instructor** *The discussion of Greece can be expanded into other areas depending upon how much time is available. It is advisable to have a number of illustrations and picture to show which can set the mood for a discussion of classical Greek Architecture. Again the class bulletin board can be used to give the theme some excitement.*

**Materials** *pictures, filmstrips, and books about Ancient Greece some basic kindergarten blocks for illustration purposes*

**Vocabulary** *post, lintel, beam, column, Tuscan, Doric, Ionic, Corinthian, Composite, Greece*

### **Procedures**

1. Show where Greece is on a map.
2. If possible show a film on Greece and/or read from one a children's book (check student bibliography) to acquaint students with the period.
3. Acquaint students with pictures of the Greek temple which was built as part of the worship of their gods(You may want to read some myths to them during this portion of the unit).
4. Explain that the temple is usually built using the column and a type of post and lintel

construction.

5. Make available some unit blocks or other types of building materials to demonstrate this to children.
6. Tell students that there were five different orders.
7. Relate the orders back to the lesson on houses and their human qualities by explaining that the orders are seen as a representation of the human form. The columns are often referred to as being male or female.
8. Show examples of the five orders and how they differ.
9. Allow children to utilize the building materials present to practice post and beam construction and making an order.
10. If possible take children outside into the school neighborhood and have children begin to identify the use of the orders in porches, churches, the school itself if appropriate, etc.

## Sample Lesson #3—Ornamentation

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### **Objectives** *Students will be able to*

1. create a book cover with an original design featuring a reoccurring pattern.
2. utilize stencils or their own imaginative alphabet to include a title and their names in a type of calligraphy

**Note to the Instructor** *Children are more apt to write if they know that it will become an actual book. It is not my intention to go into bookmaking or the subject of the book—I leave that to you. It may be something about architecture, an ABC book to share with younger children or illustrations of myths, an original story, a book of famous quotations, poems, etc. The intention of this lesson is to consider ornamentation and give the children a hands on project to complete. This lesson will probably take more than one class period to finish.*

**Materials** *Paints, markers of different widths and colors, brushes of different sizes, paper or*

**cardboard for covers, stencils of letters, and examples of fancy borders, alphabets, and designs.**

### **Procedures**

1. Children should have been working on creating a book.
2. They should now be acquainted with the fact that the orders and other parts of the classical buildings were covered with ornamentation.
3. Tell them that in the Islamic tradition the use of decoration especially on the holy book—the Koran was highly prized. Fancy writing which we call calligraphy was also used in copying holy writings.
4. Present students with a number of examples of decorative patterns and books (check bibliography).
5. Give students a small triangular block from a set of pattern blocks. Have them trace a series of triangles in a row and color them in using any two primary colors (red, blue, or yellow). Then add the square and have children do an “ababab” pattern of triangle, square. Again let children color in the shapes. Finally add a third shape—such as the parallelogram . This is in keeping with Owen Jones’ theory that the best ornament derives from the use no more than three elements. At this point the third color should be added. Remember again that Jones’ research showed the primary colors were found in the most original examples of ornamentation.
6. After some practice in patterning divide children into groups and make materials available. Tell children that they are going to make decorative book covers for their writing.
7. Along with geometric designs allow children to trace appropriate pictures and lettering on their covers.
8. After everyone is finished have a published day and have students share their books with the class. Make them part of the classroom book corner.

## **Sample Lesson #4—Final Project—“Your Dream Home”**

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### **Objectives Students will**

1. built an original house of their design.
2. the house will incorporate (l)at least one element of classical architecture (arch, column, dome)

and (2) some ornamentation—preferably personal—on the building. Thus a child who like flowers might chose to put a flower on as a roof ornament or decorate a capital with flowers.

3. write a paper describing their house and what classical features they have included. They will also describe any ornamentation used and its symbolism.

***Note to the Instructor this project will take a couple of weeks at the least. The possibilities are endless for a building project like this. The gathering of material will take some time and the teacher will have to be on the look out for materials that may be useful. Student will undoubtedly need help in cutting cardboard and some of the more difficult phases of construction. It will be time consuming but well worth the effort.***

### **Materials**

cardboard, boxes, milk cartons, colored paper, paints, markers, scissors, glue, wood chips, Styrofoam, etc. .

### **Procedures**

1. A set block of time should be set up daily when children can work on their projects.
2. Establish rules about the proper use of materials and clean-up procedures.
3. Try to establish some kind of scale so that the completed buildings can be exhibited together in a neighborhood display within the classroom.

### **Architectural Terms**

*Aedicule* is a small temple or gazebo, bandstand or pavilion.

*Acroterion* are carved decorations at the three corners of each pediment.

*Antefixes* are ornaments fixed at regular intervals along the sides of a roof.

*Architrave* is the horizontal beam supported by columns and located right above the capital.

*Arch* is a curved structure used to support the weight of the material above it. A stone at the top of an arch called the keystone holds the other parts in place.

*Base* is the bottom portion of a column.

*Capital* —in an order—forms the upper part of a column. It separates the shaft from the entablature. Each order has its own appropriate capital.

*Colonnade* is a row of columns each set equally apart.

*Composite Order* combines features of the Ionic with the Corinthian.

*Cornice* forms the upper part of an entablature and extends beyond the frieze.

*Dome* is a convex roof.

*Doric Order* is the first and simplest of the three Greek orders.

*Entablature* refers to the upper horizontal part of an order between a capital and the roof. It

consists of three parts-the architrave, frieze, and cornice.

*Fluting Shallow* vertical grooves that appear on many columns.

*Frieze* forms the middle part of an entablature and is usually decorated with a horizontal band of relief sculpture.

*Intercolumniation* is the distance between columns.

*Ionic Order* is the second of the three Greek orders. It has a capital decorated with carved spirals called volutes.

*Pergola* is a covered walkway.

*Pediment* is a triangular segment between the horizontal entablature and the sloping roof at the front of a classical style building.

*Pedestal* a substructure under the base of a column which is not a necessary part of the orders.

*Pilasters* are columns built into an existing wall and which are usually ornamental.

*Post and lintel* is a method of building in which a vertical beam(posts) supports a horizontal beam(lintel).

*Shaft* is the main part of a column below the capital.

*Tuscan Order* is an earlier order presumably made of wood and the only column with no fluting on the shaft.

(figure available in print form)

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## Notes

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1. Rapaport, *House Form and Culture* , 1-3.
2. Ibid. 47.
3. Ibid. 40-43.
4. Boomer and Moore, *Body .Memory and Architecture* , 37-55.
5. Hellman, *Architecture for Beginners* , 35.
6. Summerson, *The Classical language of Architecture* , 8.
7. Ibid. 50-51.
8. MacDonald, *A Greek Temple* , 22-25.
9. Cole and Gealt, *Art of the Western World* , 22.
10. Jones, 15-16.
11. Ibid. 16.
12. Ibid. 16.
13. Ibid. 22.
14. Ibid. 22-23.
15. Ibid. 31-32.
16. Ibid. 32-33.
17. Ibid. 32-33.
18. Myers, *McGraw-Hill Dictionary of Art* , 197-198.
19. Ibid. 197-198.

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