



Enjoying the Symbolism in the Troup Building

Curriculum Unit 93.01.09
by Stella Samuel

The building of the Troup Magnet Academy of Sciences is rich in inherent beauty and symbolism. It is currently, during the day, a haven and refuge for fifth through eighth graders who live in a declining and decaying neighborhood. Within its walls, students find safety, love and the encouragement to develop to the best of their potential. The administration and staff at Troup are committed to each individual student. However, as a teacher at Troup, I would like to see its impact on its community extended. One way this can be done is by helping the student see the architectural beauty of the building in which they spend a great part of the day. In enabling them to understand its beauty, it is hoped that they will then want to preserve its beauty and also enhance it by cleaning up its surrounding and spotlighting its unique features. In learning about the ornaments of this building and their symbolism, it is then hoped that these young people will recognize similar decorations and structures in their surroundings and that they will take pride in their neighborhood and will work to preserve the beauty of the area they live in.

Definition of a Building

I would elicit from the students their definition of a building and the discussion would lead to the conclusion that a building is a structure with walls and a roof. Another phase of the discussion with the students would focus on the various purposes of buildings and how these affect their structure. As an example, a school has a different design and different parts to that of a house. The students would then need to learn to differentiate between a building and a work of architecture. A work of architecture being a structure with a symbolic meaning and having aesthetic value.

Kit-of-Parts

The students need to know the names for the different parts of a building in order to make sense of the literature on ornamentation and symbolism. Knowing the correct names for the parts of a building would also be essential for them to understand and express themselves about their school Troup. I would supply them with a kit-of-parts and instruct them as to the definition and placement of each name. Understanding the following terms is necessary to understanding the architecture and ornamentation of a building. Included are terms basic to classical architecture.

arch	windows
beam	doorway
column	intercolumnation
pedestal	vent
roof-gable-dormer-dome	forecourt
capital	courtyard
cornice	cortile
keystone	atrium
moldings	hallways-corridors
pilaster	niche
wall	pediment
tympanum	pergola
aedicule	

The students would be given copies of these and other architectural words as taken from the glossary of the book *What Style is It?* which is printed by The Preservation Press of the National Trust for Historical Preservation. After explaining the various terms, I would reinforce this knowledge by asking the students to identify various parts that are found in the room. The students would then be taken outside of the building and have the building explained to them. They would then be divided into groups of two and three. The class as a whole would make a book of the points of architectural interest in our school with each group being assigned a certain section of the building, eg, front doorways, ornament around the windows, etc. Each group would need to either make drawings or take pictures of each item and then supply a written description or definition of it.

The information gathered at this time would form the basis of the material needed for understanding the building of the Troup Magnet Academy of Sciences.

History of Architectural Styles

A brief history of building styles would be taught with emphasis on the periods and styles found in our building. An overview of the classical architecture of Greece with its three orders Doric, Ionian, and Corinthian. Classical architecture, Gothic, and Modern should be sufficient to give students insight into where many of our architectural ideas come from.

Symbolism

Students would need to know about symbols. For example, an owl, currently, is usually associated with wisdom, knowledge, and learning; A dove is a symbol of peace; Wings represent speed; Lions signify majesty and power; etc. The symbols in our building would need to be identified and then connected with the purpose of the building. A great deal of time would need to be spent on this.

As there are a number of human forms ornamenting the building, I will discuss their significance in detail. Most of the ideas presented here are from the book *Details* by Sally B. Woodbridge.

Atlantes are related to Atlas the Titan who was sentenced to support the heavens because he joined in a revolt against the gods. Atlantes is one name for the muscular, weary-looking men bowed down by the weight of cornices, balconies, etc. They are also called heroes, perhaps as a result of incorporating this protecting effigy into the building.

Freestanding sculptures that hold up parts of buildings can be traced to legends surrounding the caryatids, the six statues of women that support the roof of the porch, sometimes called 'the porch of the maidens' of a building of mysterious use called the Erechtheum which stands on the Acropolis in Athens. Vitruvius wrote that human columns commemorated the punishment of the women of the town of Caryae (Caryatid translates as resident of Caryae) who with their husbands conspired to help the invading Persians defeat the Greeks. After the defeat of the Persians, the Greeks killed the men of Caryae and took the women to Athens as captives, where they were displayed weighted down as punishment for their sins. Turning these women into a permanent moral lesson, if indeed that was the intention behind the sculptures failed, as have many moral lessons in stone.

Although the original caryatids do not seem to be suffering, most other humans who appear in supporting roles in buildings have the distorted faces and contorted postures to be expected from bearing such a painful and permanent burden.

Whatever the origin of this enslavement of humans to architecture, the public exhibition of prisoners of war and other miscreants bound or chained to structures was common practice in many cultures.

Several kinds of detached heads appear on Classical buildings on the keystones of arches, gazing out from under balconies and roofs or festooned with foliage on friezes. These heads are usually bearded males with long curling locks that merge into plant tendrils. This category of ornament has long been labelled "grotesque" and is commonly used to describe something that is distorted or twisted out of its natural state.

Classical male and female heads were fashioned after traditional representations of gods, goddesses, heroes, and typically female personifications of virtues such as justice and truth. Bearded male heads with long tangled locks of hair and fierce expressions may be Titans, the secondary race of gods spawned by Uranus and Gaea, who were giants and therefore capable of bearing heavy loads.

Human heads were used in ornamentation of buildings and were intended to humanize buildings as well as to bring good fortune.

In Classical times, famous temples exemplified its style. The interiors were not used in public rituals so not much is known about its purpose or its appearance. However, the exterior was studied extensively and is still being studied to discover the rules that governed its composition. This has been analyzed down to the smallest detail. However, once understood, the temple was viewed as a kit of parts that could be taken anywhere.

Understanding the myths surrounding the origins of some of these structures gives meaning to apparently non-related figures and ornamentation.

Myths Behind the Symbols

Quoting from Woodbridge, "In his book, *The Lost Meaning of Classical Architecture*, George Hersey conjures up a vivid picture of the primordial temple as an altar set in a grove of trees, perhaps roped off to indicate a holy precinct. The trees were hung with the trappings of sacrifice, with the fruits and flowers of the harvest, and with the physical remains of sacrificial fowl and animals. According to Hersey, the latter were valued because they used to reassemble the victim and thereby turn the taking of life into a whole new service. Thus, battle trophies composed of the slaughtered enemies' armor were exhibited not only as symbols of victory but also as a propitiation to the spirit of the deceased. Similarly, the bleached skulls of oxen, the beaks and claws of birds, and their many small bones were strung together on lines and displayed along with votive tablets and other paraphernalia used to invoke the divine presence."

To me, this adequately explains the use of many combinations of unrelated details used in decorating buildings. The Classical world used them in this way and through the years they have been copied, ornamented, stylized, and used as a basis for completely different ideas. Understanding the basics helps in understanding the use of ornament during various architectural periods.

The ancient Greeks worked out an exquisite language of structural details that, according to some theories, served the purpose of memorializing the construction of the original wooden temples when longer-lasting stone became the preferred building material. The Roman architectural writer Vitruvius from whom we derive most of our knowledge of Greek building practices, is an important source of this explanation for the form of the temple. Accordingly, the parts made from three tree trunks became stone columns that supported the horizontal superstructure called an entablature, formerly a series of wood beams, which in turn supported the roof.

According to Vitruvius, the so-called classical orders, or types that comprised the columns and the entablature were named for their place of origin and the people who created them, the Dorians, the Ionians, and the Corinthians.

The Doric temple which appeared in the fifth century B.C., seems to have its basis in stone corn cribs which were used in various parts of the world. They have stone walls cut with slits very much like triglyphs. Also, the cribs are raised on stone posts capped with disks which were probably designed to keep rats and mice away. However they suggest the form of Doric capitals. It has been suggested that the whole Doric entablature was a compressed symbolic upper floor which is analogous to the barn lofts used for storing grain.

Quoting from *Details*, "one interpretation of the Corinthian capital is based on the tale of a young maiden of the Greek city of Corinth who died before marriage and was duly buried. Her nurse gathered up some of her favorite possessions and put them in a basket, which she placed on the maidens grave as a memorial. She covered the basket with a tile to weigh it down and keep out the rain. The nurse failed to notice that she had set the basket on top of an acanthus shoot, which, struggling to grow, curled its tendrils out from under the basket. In time, the leaves unfolded around the base of the basket and beneath the tile lid. Who should be passing by but an architect, Callimachus, who was inspired to use the composition for a column capital." (See fig.1)

(figure available in print form)

Hersey discusses the possibility that real human beings may have been lashed to the temple supports as sacrificial offerings. This would explain the names for many parts of the column, "It is possible to see the leafy bands around Corinthian capitals as head bands or the volutes above as tightly coiled braids of hair." (See fig.2)

(figure available in print form)

The theories behind the origins of various structural elements of building, and ornaments is fascinating. I expect my students will get excited about the ornaments used in our building. I would have each student research, study, and write about one of the ornaments or symbols they described in lesson 3. I would guide their thinking so that they could discover if there was any correlation between the purpose of our building and its ornamentation. For example, if a human figure was used what would it be holding in its hand?

Brief History of New Haven

The study of the history of New Haven is intriguing. *New Haven: a Guide to Architecture and Urban Design* by Elizabeth Mills Brown provides an authentic and fascinating look into the origin and growth of our city.

New Haven was founded in 1637 as both a Puritan community and a mercantile enterprise. It was the capital of an independent colony and had hopes of becoming an empire with a fortune being made in the beaver-skin trade. However, this did not happen. The merchants died or left. The poor people could not do much and New Haven lost its independence and became part of the Colony of Connecticut.

New Haven was far from the cities of New York and Boston. Life was poor. However in 1701, Yale College was founded and was the third College in America. New Haven had a bitter fight with Hartford but was finally chosen as the seat for this new college.

From 1750-1835, the city entered a period of prosperity as the port came back to life. In 1784, it was chartered as a city. "With the best harbor in western New England, it was soon a major port. At the same time, tanning and shoemaking flourished, and small shops making earrings and hardware began to appear."

During the years of 1835-1860, New Haven became a manufacturing town. They made carriages, guns, rubber boats, clocks, and hardware. The leading figure at this time was James Brewster who built the first railroad to New Haven and did much to develop the city's manufacturing ability. By 1860, New Haven was carriage maker to the world.

The Civil War was a disaster because most of the New Haven market was in the south. In 1873, New Haven lost its status as co-capital of Connecticut. Hartford was now the only capital of Connecticut.

1880-1929 saw New Haven become an industrial city. The Winchester Repeating Arms Co. located here. The railroads were consolidated into a single system with New Haven as the head. The invention of the world's first telephone exchange and the establishing of SNET and the development of Yale College to Yale University all contributed to making New Haven a boom town during these years. The city grew and expanded into the suburbs.

During 1929—the present, the problems of an American industrial city grew and took over the city. A great deal of time, money, and effort is being put into New Haven to reclaim and restore it. We need to seek varying ways and means of contributing to this effort.

The Augusta Troup school was built in 1924 and designed by Charles Scranton Palmer. It has large Tudor windows and patterned brick. It is an example of a widely used model for school design in the 1920's.

As a culminating activity to this unit, I would have the students design an ornament or symbol that would be

appropriate for Troup. They would need to designate a place where it could be used and the significance of its symbolism. It is hoped that this will fire them with love and enthusiasm for their school and neighborhood.

Suggested Schedule for Instruction

Each lesson is planned for a period of 40 min.

Day 1—Discussion of what a building is.

Activity: Tour of interior of the building with emphasis on the purpose of the building and how it is achieved.

Day 2—Kit-of-Parts

Activity: Worksheet of matching names with pictures of the parts of a building.

Day 3—Brief Review of the Kit-of-Parts

Activity: Divide class into groups of 2 or 3. Tour the exterior of the building; assign each group a section of the building. For example; front doorway, ornaments around the windows, etc. Each group would need to make drawings or take photographs of each ornament in their section, and supply a written description or definition of it.

Day 4—Complete group work on ornaments. Turn in assignments. These will then be put together to form a dictionary of architectural ornament and will be displayed on a bulletin board.

Day 5—Lecture giving a brief history of architectural styles. This will focus on the Doria, Ionian, and Corinthian orders as compared in columns of these styles. The mythical origins of these styles will be explained. The words Classical, Gothic, and Modern, in reference to styles, will be introduced.

Activity: Students will be given handouts with pictures of the three different styles of columns. They will be asked to orally identify the differences between the three orders of columns. There will be an oral review of some of the words from the kit-of-parts such as capital, column, cornice, etc. The students will be asked to identify these parts in their pictures of the columns.

Day 6—A walking tour of various buildings on the Yale campus to reinforce knowledge of the Classical orders and to point out significant architectural details on them.

Day 7—A quick oral quiz on the Doric, Ionian, And Corinthian columns. Bridge into the myths behind ornaments and symbols. Have either a slide presentation or a photographic scrap book on architectural details. Explain the myths that surround them. Lecture specifically on the symbolism of; (1) owl, (2) dove, (3) wings, (4) lions, (5) Atlantes, (6) Hermes, (7) Caryatids, (8) Prisoners of war, (9) grotesques, (10) Flowers, Foliage, and trophies and their possible relation to temple rituals, and (11) acanthus.

Activity: Research and write about one of the symbols or ornaments pictured in lesson 3 and 4.

Day 8—Lecture—a very brief history of New Haven.

Activity: A 100-150 word essay on what each student thinks was an influence on the design of Troup.

Day 9—

Activity: Design an architectural ornament for Troup taking into account lessons learned in symbolism and architectural detail. Tour the exterior of the school and each student will choose the location of his/her ornament. Explain that the ornament can be designed by using one or combining several of the following techniques; (a) making a collage, (b) drawing the design of the ornament, (c) xeroxing a photograph, eg. Drawing a niche and then xeroxing a photograph of the symbol to go in it. The design can be done in either black and white or in color.

Day 10—Continue designing an architectural ornament.

Day 11—Turn in design of ornaments. Have each student present his/her design and give a very brief oral report on its significance. For example, “I chose an eagle for my ornament because . . .”

Day 12—Display drawings in an exhibition at school. Invite parents and interested school personnel to attend. Have a cookies and punch reception.

(figure available in print form)

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Students Reference Books:

ABC's of Architecture , The Preservation Press

I Know that House , The Preservation Press

What Style Is It? , The Preservation Press

Additional Sources of Information

The New Haven Colony Historical Society,

114 Whitney Ave.

New Haven CT

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